Development Control Committee A – 2 March 2016

ITEM NO. 1 & 2

WARD: Windmill Hill

CONTACT OFFICER: Peter Westbury

SITE ADDRESS: Bristol Arena Former Diesel Depot Bath Road Brislington Bristol BS4 3DT

APPLICATION NO: 15/06069/F & 15/06070/P — Full Planning & Outline Planning

EXPIRY DATE: 26 February 2016

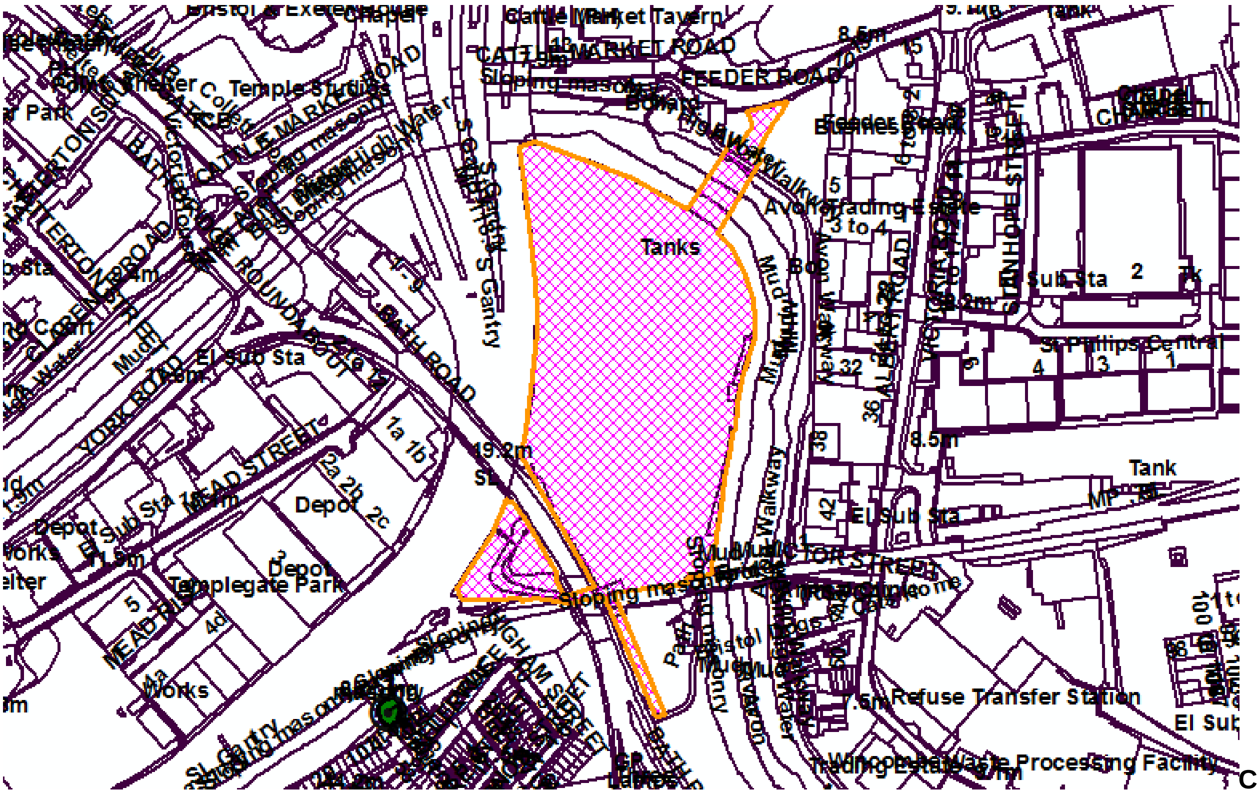
Construction of 12 000 capacity indoor arena (Use Class D2) on the south part of the site, creation of public plaza in front of arena and landscaping of the site; Permanent disabled parking (45 spaces) and cycle parking facilities (252 spaces), temporary surface level parking for operational staff and VIP's (200 spaces) for a period of 5 years; Pedestrian and vehicular access via bridge from Cattle Market Road (under construction) and provision of new pedestrian access and steps from Bath Road. Existing vehicular access from Bath Road to be retained as a restricted access - Major application/Environmental Statement

RECOMMENDATION: Grant subject to Condition(s)

AGENT:
CSJ Planning Consultants Ltd
1 Host Street
Bristol
BS1 5BU

APPLICANT:
Bristol City Council
Major Project Team
Brunel House
St Georges Road
Bristol
BS1 5BU

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



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1.0 SUMMARY

1.1 These applications are brought to Committee on account of the scale of development proposed and the level of public interest shown in the scheme. There has been no member referral.

2.0 BACKGROUND

2.1 Two applications have been submitted. One application is for full planning permission for the Arena and the second one for outline planning permission for the redevelopment of the remainder of the former Diesel Depot Site on Bath Road. The site is now known as "Arena Island" and is located within the Temple Quarter Enterprise Zone (TQEZ).

2.2 Bristol City Council has a policy commitment to deliver a major indoor arena. Policy BCAP35 of the Bristol Central Area Plan identifies the Bristol Temple Quarter as a location appropriate for a major indoor arena.

2.3 A design competition for the proposed arena was held at the beginning of 2015 and overseen by RIBA, with Populous in association with Feilden Clegg Bradley Studios (FCBS) and Buro Happold Engineering identified as the successful design team. Following the design competition, Bristol City Council, in its role as project promoter, has commissioned various professional consultants to development the proposals for the site.

2.4 The Council also has the role of the Local Planning Authority (LPA) in which it must assess the proposals objectively.

2.5 As the LPA considered that the development proposals could have significant environmental impacts, the proposals have undergone an Environmental Impact Assessment (EIA). The applications are therefore supported by an Environmental Statement (ES).

2.6 These applications are the result of detailed pre-application work that commenced in April 2015 and have been the subject of extensive public consultation.

2.7 As part of the application process, neighbouring residential areas were consulted. Network Rail, Highways England, Historic England (amongst others) have all been consulted. Coming out of the public consultation there is general support for the arena but particular concern about the access to the site and parking arrangements for the arena and the implications of this development on traffic generation into this part of the city. Given the location of the site in proximity to the city centre and close to Temple Meads station, the Applicants emphasise that the objective is to have a sustainable development that is supported by public transport, walking, cycling and utilising existing city centre parking infrastructure.

3.0 SITE AND SURROUNDING AREA

3.1 The application site has an area of 3.7ha and is located within the Windmill Hill ward of the city, although it also lies in close proximity to the wards of Knowle and Lawrence Hill. It is bounded to the north and east by the River Avon. The site is close to Temple Meads railway station, to the north, and operational railway lines run alongside the site to the west and south. Bath Road (A4) runs along part of the south western boundary and crosses over the south west corner of the site.

3.2 Access to the site is currently gained via a small service road from the inbound lane of Bath Road, which then passes under Bath Road to the rest of the site. Due to river and rail boundaries, and the elevated nature of Bath Road, other than this service road there is

currently no other access to the site. Planning permission has been granted for a vehicular and pedestrian bridge that will provide access to the site from Cattle Market Road, and this infrastructure is currently under construction. There is also a proposal for another pedestrian bridge to the site from Albert Road, which is the subject of a separate application which is pending consideration and is due for determination by 11 March 2016 (16/00222/F).

3.3 Despite its proximity to the River Avon, the site sits on an elevated platform and is therefore located within an area considered to be at a low risk of flooding (Flood Zone 1).

3.4 The site was historically used for a range of industrial activities, including a colour works, gas works and a former diesel depot in association with the railway. For the latter use, the site contained engine sheds and tracks that merged with the adjoining railway line. Since the cessation of the use of this land, the site has been cleared and partially remediated.

3.5 Arena Island is located within the Temple Quarter Enterprise Zone (TQEZ). As set out in the Bristol Central Area Plan, the vision for the TQEZ is embedded in Policy BCAP35. It is to see the area developed for a wide range of uses as part of the growth and regeneration of the area as an employment-led, mixed-use quarter of the city centre, an exemplar for new initiatives and a hub for all creative minded businesses. There is a policy requirement to deliver (alongside a major indoor arena and complementary leisure uses), at least 100,000 sqm. of net additional high quality office and flexible workspace, up to 2,200 new homes (including live/work space).

4.0 SITE PLANNING HISTORY

4.1 In December 2004 planning permission was granted for the remediation of the site involving excavation of contaminated made ground and underground structures and treatment via soil washing (03/04217/F).

4.2 In February 2014, planning permission was granted for the provision of new access road from Cattle Market Road/Feeder Road, including new bridge structure and associated alterations and improvements to Cattle Market Road/Feeder Road (09/03006/F). This is currently under construction.

Application 15/06069/F

4.3 The full application (15/06069/F) is for the proposed arena. The description of development is set out above.

4.4 The proposed arena is an oval shaped building with a horseshoe seating area to afford the greatest flexibility for future use. It has an area of 9,350 sqm and a height of 29m. The seating capacity is 10,000 people, however, with standing the arena will be able to accommodate 12,000 people. The arena is split over four floors. The main entrance to the building will be from a plaza to the north, which is accessed from the new bridge over the river Avon.

4.5 The Applicants indicate that the Arena will hold up to 116 events each year, of these up to 20 will have the maximum capacity of 12,000. Other concerts and events will have 3,000, typically between 1930-2300hrs in no particular pattern. No other events will be held on days when a 12,000 capacity event is taking place. Between 6 and 12 weekends per annum would include family events during the day-time, for example a Disney Dancing on Ice event would be three shows a day commencing at around 11am. A maximum of 6,000 would attend this type of event.

4.6 The future arena operators have indicated that for a large concert up to 400 staff will be

working, usually arriving one hour prior to Arena doors opening. Door opening would be 90 minutes before the event start time. It is anticipated that at the end of an event, it will take between 20 and 30 minutes for the arena to empty. Staff departures will be 30-60 minutes after that.

4.7 The access arrangements for the proposed arena are summarised in the transport section of this report.

Application 15/06070/P

4.8 The description of development for the application for outline planning permission (15/06070/P) is set out above.

4.9 Although all matters are reserved for subsequent approval, the application includes an indicative amount of development - 19,000 sqm of gross external area (GEA), this comprises 9,400 sqm. of residential development that could accommodate up to 80 apartments, 1,400 sqm. of commercial A1/A3 uses and 8,200 sqm of commercial B1 uses.

4.10 An indicative plan has been submitted. It includes the indicative provision of five individual buildings and is described in the following terms in the Design and Access Statement that accompanies the outline application. Initially there were six blocks but one has been removed and therefore the indicative proposals for the site are as follows:

Indicative Provision

Building	**Residential (Gross External Area) (sqm)**	**Notes**	**Storeys**	**A1/A3 GEA (sqm)**	**B1 GEA (sqm)**	**TOTAL GEA (sqm)**
1	4,000	It is anticipated that each floor will provide up to 4 two bed apartments on each floor (32)	8	-	-	4,000
2	-	Ground floor A1/A3 uses. At least 100 sqm of area on the ground floor area as an entrance and circulation zone.	6	700	4,100	4,800
3	-	As Block 2	1 + 5	700	4,100	4,800
4 – Removed from the indicative layout.						
5	3,900	As Block 1 (32)	8	-	-	3,900
6	1,500	8 storey residential building providing up to 2 one bed apartments on each floor (16)	8	-	-	1,500
TOTAL	**9,400**			**1,400**	**8,200**	**19,000**

5.0 ENVIRONMENTAL IMPACT ASSESSMENT

5.1 In April 2015, the Local Planning Authority provided a screening opinion confirming that as the proposals could have significant environmental impacts there was a need to provide an Environmental Impact Assessment (EIA) (Application Reference 15/01757/SCR). Therefore in addition to the technical assessments in support of the planning applications, an Environmental Statement (ES) has been submitted.

5.2 The ES includes chapters on the following:

- Transport
- Air Quality
- Historic Environment (Archaeology and Heritage)
- Townscape and Visual Assessment
- Sustainability
- Ecology
- Ground Conditions (Soil, Geology and Contaminated land)
- Water Resources and Flood Risk
- Noise and Vibration
- Lighting
- Socio-Economic Effects
- Waste
- Construction Management

5.3 A summary of the EIA is included as an appendix to this report.

5.4 The main conclusion of the ES is that the development proposals will result in “many positive impacts and provide a high quality modern regeneration of a derelict site with a new arena and new city centre destination space. The spaces and building work together to provide enhanced pedestrian and cycle linkages to the city centre and maximise the sustainability opportunities for travel.” (Environmental Statement, para.20.16.2)

5.5 Furthermore:

“It will provide a landmark building and high density 8 storey buildings in Phase 2 which whilst creating a few major adverse impacts generally create minor to moderate impacts on city views. Some adverse impacts do arise by the very nature of development, but on the whole these are mitigated with design and technical measures to ensure no adverse harm in planning terms. This has to be weighed against the many other planning benefits the development delivers.” (Environmental Statement, para.20.16.3)

6.0 EQUALITIES ASSESSMENT

6.1 The public sector equalities duty is a material planning consideration as the duty is engaged through the public body decision making process.
“S149 of the Equalities Act 2010 provides that a public authority must in the exercise of its functions have due regard to:-

(a) eliminate discrimination, harassment, victimisation and any other conduct prohibited under the Act

(b) advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it

(c) foster good relationships between persons who share a relevant characteristic and those

who do not share it.

6.2 During the determination of these applications due regard has been given to the impact of the scheme upon people who share the protected characteristics of age, disability, gender reassignment ,marriage and civil partnership, pregnancy and maternity , race, religion or belief, sex and sexual orientation. In their assessment of these applications your officers are satisfied that any adverse impacts can be addressed and mitigated through the detailed design of the buildings and the imposition of appropriate conditions

7.0 CONSULTATION RESPONSES

7.1 A Statement of Community Involvement has been submitted by the Applicants which sets out in Table 10.2 the issues raised and the responses from the Applicants. Your Officers are satisfied that this work was thorough and identified the key issues in addressing the impact of the application proposal.

7.2 Site and press notices were posted and 1,129 surrounding properties were consulted directly. As a result a total of 121representations were received (at the time of the preparation of the Officer's Report)

Representations received from Councillors and Members of Parliament

7.3 No comments received.

Summary of Internal Consultees' Comments

BCC Transport (Development Management) Team (TDM)

7.4 In view of the magnitude of transport matters affecting this application, the TDM team has submitted their detailed observations in report format. Members are therefore referred to the full transport response that is attached to this document as an Appendix to the Report. The comments of the TDM team are however briefly summarised below:

7.5 The above proposals generate substantial transport issues that require to be comprehensively addressed in the interests of: the success of the development; its impact on the highway network; and the environmental quality of the wider area.

7.6 The fundamental policy requirement is therefore to ensure that a package of sustainable transport infrastructure is implemented to support the development. In this context, many of the requirements contained in this report are not considered as mitigation, but are minimum access requirements that will enable the site to operate successfully and sustainably from the first event onwards.

7.7 It should be noted that BCC cannot enter into a section 106 legal agreement with itself to secure infrastructure that is vital to the development. Therefore, a robust and implementable series of conditions is sought from this scheme in the interests of arena users and others affected by the development.

7.8 It is however recognised that some of the requirements will rely on separate processes, agreements and consultation with third parties and therefore cannot be subject to specific planning conditions. The TDM team has been actively working with the Arena Project Team on these issues.

7.9 TDM seeks significant comfort that suitable and robust mechanisms are put in place in order to

deliver the appropriate infrastructure and at the right time to serve the arena development in policy compliant a way that:

a. minimises the negative impacts of additional traffic generation in Bristol.

b. offers viable and realistic alternatives to car use that are of high quality and that compliment events taking place at the arena site;

c. ensures safe and suitable access for all users wishing to access the site;

d. delivers high quality permeability to and through the island site in a way that does not compromise the future movement objectives of the wider Temple Quarter Enterprise Zone;

e. successfully discourages private car travel to the site through an effective package of deterrents to car use alongside the marketing and promotion of incentives for sustainable travel;

f. provides high quality information to those travelling by car relating to the availability of parking inside and outside of the city;

g. Effectively manages the movement of visitors / spectators / deliveries and performers to and from the arena in such a way as not to compromise their safety and that of highway users unconnected to the arena.

h. Ensures the adoption of safe and practical measures during the construction of the development that avoid detriment to the surrounding highway network or nearby businesses / residents.

7.10 In Transport terms, the degree to which the Arena development and therefore the City Council effectively addresses the above requirements is pivotal to the long term impacts and therefore the success of the facility in serving not just the residents of Bristol but the wider South-West region. This is not just in the interests of the commercial success of the Arena in attracting activity and investment, but also the health and wellbeing of the residents of the City of Bristol and other users of its highway network.

7.11 TDM has therefore identified the following four key physical interventions which must be successfully delivered in order for the above goals to be achieved. These are examined in greater detail in this report.

a) The operation of rail and bus-based park and ride services to coincide with the end of arena evening events, to reduce car trips and to intercept visitors travelling by car before they enter Bristol's highway network;

b) The implementation of restrictive parking controls in areas that would be negatively impacted by short-term mass demand for on-street parking;

c) The implementation of safe facilities for picking up and dropping off movements by taxis, coaches, disabled users and general traffic;

d) A safe and convenient environment for pedestrians and cyclists within and around the site which encourages rather than deters walking and cycling;

7.12 TDM considers that subject to the delivery of the above interventions and at the correct time, the development proposal will be acceptable in transport terms.

BCC City Design Group (Incorporating comments from Landscape Officer, City Archaeologist and Conservation Team)

7.13 City Design Group welcomes the proposal. It fulfils a longstanding ambition to develop an important cultural venue for the City. The location and broad design of the proposal is as per the TQEZ Framework and the policy guidance. There are however few areas where there is scope for further design refinements and improvements and considering the scale and complexity of the project it is not unexpected. The refinements can be addressed via appropriately structured planning conditions and therefore it in recommended to approve the application with planning conditions.

7.14 The areas where there is scope for further design review and refinement which can be addressed by planning conditions fall under the following headings:

7.15 Strategic movement framework: In order to serve its role within the wider townscape, attain the sustainable movement framework for the area and encourage use of the arena island as a key community facility it is essential for the arena island to be connected into a wider movement framework as being proposed by the emerging TQEZ Spatial Framework.

7.16 Landscape on the island: The plaza and external arrangement is broadly supported but it is noted that the terraced sitting proposals will need to be resistant to intense use. Timber decking needs to be slip resistant and durable.

7.17 Moving forward the landscape layout needs to be responsive to the requirements of the context and movement framework and its management and maintenance needs to be properly considered.

7.18 The creation of smaller outdoor events spaces adjacent to the plaza are broadly supported. Further design work is required for the structural landscaping and the materials that are to be employed this should be covered by condition.

7.19 Tree planting: The proposed tree planting strategy is acceptable in principle, although the details include within the Applicants' Design and Access Statement give rise to concerns about long term viability and this reinforces the need for a landscape condition (including details of tree pits on the arena approach).

7.20 Appearance of the Arena: The general design and appearance of the Arena building is supported and presents the potential to deliver an iconic landmark building for the city. It will be critical to ensure the quality of the final scheme deliveries the design expectations set out in the Design and Access Statement and design concept by the lead artist.

7.21 Public Art: The public art strategy submitted with the planning application needs an update to separately identify and emphasize the distinction between the public art component for the building and the wider Arena Island. It is therefore recommended to seek an updated public art strategy and series of detailed design for the artwork.

7.22 Buildings' height, scale and massing: The siting, height, scale and massing of the Arena building and the general arrangement of the key aspects of the development parcels within the Island site are as per the TQEZ spatial framework are accepted.

7.23 Archaeology and conservation: The site has very low archaeological potential. Further the impact on the settings of conservation and listed buildings is in keeping with the policy requirements.

7.24 City Design Group's comments in full are included as an appendix to the report.

BCC Economy Team

7.25 The Economy Team of BCC considers that development of the arena in Temple Quarter will be a net economic benefit to the city and the West of England, based on the information available from a range of sources to date. As well as the direct investment and jobs connected with the building and running of the arena there will be significant wider economic benefits. The strengthening of the city's cultural physical infrastructure and the integration of the arena with the wider enterprise development zone will bring direct and indirect economic benefits and is consistent with economic policy and strategy nationally, sub-regionally (West of England) and at a city of Bristol scale.

7.26 A study commissioned by Bristol City Council in 2014 and prepared by ERS Research and Consulting estimates that the arena will bring 274 permanent jobs to Bristol and add £110.9 million to the local economy over 25 years (ERS 2014).

7.27 Bristol City Council's figures on the expected employment generation within the Temple Quarter enterprise zone as a whole set a target of creating 4,000 jobs in the first five years and around 17,000 in the 25 year lifespan of the project. By the summer of 2015 Bristol City Council over 2000 jobs had been located to the enterprise zone since its launch in 2012. It is estimated that the new arena and the surrounding restaurants, bars and hotels will generate 1,000 jobs.

7.28 A wider impact still is shown by another study commissioned by Bristol City Council and produced by Amion Consulting as part of the Environmental Statement for the planning process. This is also positive in its overall conclusion that the arena will be an 'iconic piece of cultural infrastructure' and influence the creation of over 5,400 gross additional jobs in the sub-region directly and indirectly.

7.29 It will be important to get the traffic and transport system as efficient as possible to manage the increased visitor numbers to the city.

7.30 In respect of the Related Hospitality Industry, as the arena will contribute to the linked cultural and hospitality sectors, employment and economic impacts from the arena will be positive overall, although much of the employment is not well paid and is part time and temporary.

7.31 The Council's aspiration is that a significant proportion of the new job opportunities arising in the EZ over the next 25 years should be filled by Bristol residents. As the levels of job opportunities will increase and are likely to peak in 10-15 years' time, this offers the opportunity to 'grow our own', giving young people the skills needed to fill these jobs when they come available.

BCC Air Quality Management

7.32 In respect of the construction phase:

Dust: An appropriate assessment methodology has been used to assess the potential construction dust impacts from the development and should be incorporated into a relevant

Construction Environmental Management Plan (CEMP). If these mitigation measures are implanted it is considered that the construction dust impacts will be insignificant. These conclusions are relevant for both Phases 1 and 2 of the development proposal.

Vehicle Emissions – HGV's: The air quality assessment predicts that during the 2 year construction period for Phase 1 of the development, approximately 28 daily HGV movements would be generated. The potential impact of emissions from the HGV movements predicted have been screened out using an outdated guidance document (EPUK 2010) which states that changes in HGV movements of <200 per day are insignificant.

The Transport Assessment states that the numbers of HGV vehicle movements are not yet known. If movements are likely to be significantly greater than the 28 two way movements predicted in the air quality assessment, consideration may need to be given to carrying out an assessment which takes account of HGV emissions. As a minimum, it is essential that the construction traffic management plan (CTMP) ensures that HGV vehicle routing avoids using residential streets to access the site in order to minimise the potential impact of HGV emissions at relevant receptor locations.

Operational Impacts

Phase 1

7.33 The impacts of the predicted increase in traffic have been shown to be negligible at all receptor locations considered for both NO_2 and PM_{10} concentrations.

Coaches

7.34 The transport chapter of the planning application states that a designated coach drop-off and pick-up point will be provided at the northern end of Albert Road. The exact location of this area should take into account any existing residential usage of buildings in the area to ensure exposure to pollution from the coaches is minimised at these locations.

Phase 2 – Operations Impacts

7.35 Due to the low levels of on-site parking proposed and the sustainable location of the development, the potential impacts associated with Phase 2 vehicle movements have been screened out as insignificant.

Temporary Combined Heat and Power (CHP)

7.36 The CHP is insignificant in the air quality assessment.

BCC Pollution Control

7.37 Pollution Control comments that significant discussions took place before submission of the application. The application report satisfies us that the use in principle can be acceptable on amenity grounds and that it is possible to recommend conditions to address noise so that there is no significant effect.

7.38 At this time the final design is not set and background noise levels in the immediate vicinity of the site may change due to the current main train line electrification project. Therefore there may need to be further assessments and a report to confirm that the final design will meet the necessary sound insulation standards for the desired entertainment noise level. It should also be noted that the premises will require a Premises License for due to regulated entertainment, alcohol and sporting events and therefore there will also be an opportunity for Bristol City Council to regulate management of the arena in further detail so as to prevent public nuisance. Relevant conditions are recommended.

BCC Sustainable City Team

7.39 Comments made in respect of Core Strategy Policies BCS13, BCS14, BCS15 and BCS16.

Policy BCS13 Climate Change

7.40 All new development should be designed with the future climate in mind through climate change mitigation & adaptation techniques.

Mitigation

7.41 Any opportunities to reduce energy demand through design and efficiency measures should be taken. The energy strategy should clearly set out how this has been achieved and should list clearly those energy efficiency measures that the applicant is committed to incorporating. Further advice is provided below.

7.42 Whilst the provision of 252 cycle spaces goes some way to meet policy, as raised in the pre-application process, the assumption that "the full number of 504 cycle spaces can then be halved due to the high level of public transport accessibility" is questionable.

7.43 There could be adverse commentary to the provision of more space for cycling space to the relatively, and necessarily, low numbers of car parking spaces, and people not fully aware of the full scale of cycling in the city may be sceptical as to whether all spaces would be used. To this end at the detailed planning stage should demonstrate where future cycling, in the order of the remaining half of the 504 figure, could be provided as and when the need becomes apparent e.g. through overcrowding and problems with bicycles locked in inappropriate locations.

7.44 In addition the access from all sides of the site need to be evidenced in detailed planning particularly the southern pedestrian/cyclist linkage from the A4/A37 as the bypassing of the existing substandard footway along the A4 Bath Road is critical to achieving a number of policies. The removal of the advertising hoarding structures as part of this would be particularly advantageous in addressing these issues as well.

7.45 Additional detail on walking treated separately from cycling as needs and design solutions are quite different, and **h**ow people will access the site on foot as this is very important, particularly with large numbers of people parking in Cabot Circus and Avonmeads.

Adaptation

7.46 The only areas not addressed adequately are flooding around the bridges (acknowledged in the application documents); the current lack of proposal for a Green Roof which would significantly address climate change adaptation; and tree planting over the car park (non-disabled).

7.47 Development should include ways to mitigate extreme temperatures brought about by climate change. This should include planting, canopies and awnings for shade - Where the development incorporates outdoor space including for car parking, we would request the use of soft landscaping and tree planting to address the need for shading and mitigate the urban heat island effect.

Sustainable Energy

7.48 All new development is required to minimise energy demand through sustainable design.

7.49 The application complies with Policy BCS14 through the proposed connection to the district heating scheme for the TQEZ.

Energy efficiency

7.50 In respect of energy efficiency, the application proposal will achieve BREEAM "Excellent".
Renewable energy generation

7.51 Development should meet 20% of the residual energy demand through renewable energy sources.

7.52 The application currently meets policy, it is important that as the application only just meets the 20% policy lower threshold that this is protected going forward.

Sustainable Construction

7.53 Policy BCAP20: Sustainable design standards states that a development of this nature will need to be BREEAM "Excellent". The planning application at this stage is on track to meet policy, and it is very important that this is achieved.

7.54 It might reasonably be expected that provision of more detail in a number of BREEAM credit areas could see credits rise in areas such as safety and security, water consumption and energy efficient equipment.

Waste & recycling

7.55 The application addresses this aspect of policy well with the exception of Recycled Aggregates.

Water

7.56 Development should conserve water through rainwater harvesting and the adoption of water efficient appliances. Not all water consumption figures are available in the BREEAM pre assessment. Measures could include: flow restrictors, spray taps, percussion or sensor taps, dual flush WC, Eco showerheads, Low water use washing machines and dish washers, leak detection methods. More detail at reserved matters stage should demonstrate the rain water/grey water recycling systems contribution and hopefully see above a 40% reduction in water consumption below BREEAM baseline.

Materials

7.57 Development should consider type, lifecycle and source of construction materials, with A or B rated BRE Guide materials should be prioritised.

7.58 At the time of submission the material efficiency study had not been started. Hopefully this along with exploration of opportunities to improve material efficiency (e.g. steel structure design) will increase the sustainability of the application against this issue.

Flexibility & adaptability

7.59 This has been addressed within the application in line with the type of development proposed.
Biodiversity

7.60 Biodiversity enhancement for a site of this nature are relatively limited but could include; sustainable drainage systems such as green roofs, brown roofs, living walls, the inclusion of bird and bat boxes and the planting of fruit/ nut bearing trees.

7.61 For this reason it is disappointing in respect of a range of BCC Policies including BCS9, BCS15, BCS16, BCAP25, DM29 that it is not currently proposed to pursue a green roof for the Arena. In the broadest sense of sustainability, a green roof, ideally of biodiverse substrate type, would be beneficial to the development, the site, the success of the arena and the profile of the city, as well as the biodiversity and water-related benefits.

Bream for Communities

7.62 The undertaking of Bream for Communities is fully compliant with policy and the current trajectory of achieving excellent is commendable.

Flood risk & water management

7.63 Development should reduce surface water runoff by 30% by including sustainable drainage systems. SuDs will also enhance biodiversity and improve water quality and should therefore be maximised on this site.

7.64 Positive aspects of the application with regards to this area of policy include the permeable hard surfaces listed as compacted gravel and permeable block, with more detail on specification of blocks anticipated in the detailed stage.

BCC Flood Risk Manager

7.65 The plan to discharge surface water directly to a watercourse, the River Avon New Cut, is appropriate at this site location.

7.66 The selected SuDS features should function adequately and provide improvements in water quality. This is a drainage strategy driver for the central area according to the West of England Sustainable Drainage Developer Guide, Section 2 Bristol Local Sustainable Drainage Design Guidance.

7.67 The modelled simulation of a combination of critical rainfall events combined with extreme tidal flooding scenarios that the region is susceptible to has assessed the capabilities of the proposed drainage system. This and the associated calculations demonstrate that the drainage strategy will operate accordingly under such conditions and is therefore acceptable.

7.68 The flood risk posed to the site is low but given the higher flood risk posed to the area just north of this point the proposed evacuation route southwards along the A4 would be apt during a large scale tidal flood event.

BCC Nature Conservation Team

7.69 Bats: A common pipistrelle bat was recorded roosting in the road bridge in the south-west corner of the site in the ecological survey (ecological appraisal) dated June 2014. The ecological consultant's assessment is that the bat roost will be disturbed and will probably be lost as a result of the development. Accordingly it is proposed to provide a number of compensatory bat roosting features on the existing wall facing the River Avon in the east of the site. Bats are a highly protected European Protected Species, a legally protected species and a material planning consideration. Accordingly work must not commence until a Natural England licence has been obtained for the works, an ecological mitigation scheme must be

conditioned for bats and the planning case officer must apply the three derogation tests under the Conservation of Habitats and Species Regulations 2010 (as amended) prior to the determination of this planning application.

7.70 A relevant condition and advice note is required to meet the statutory requirements of the Conservation of Habitats and Species Regulations 2010 (as amended).

7.71 A dark corridor will also need to be maintained between the common pipistrelle bat roost and the River Avon. The River Avon (part of) Site of Nature Conservation Interest (SNCI) is also a key commuting route for bats including light-sensitive species. Accordingly a relevant planning condition is recommended.

7.72 No bats were recorded roosting in the structures within the voids under the A4 embankment during detailed bat surveys. The voids do not therefore currently comprise a bat roost (although please note that further winter bat survey is recommended.

7.73 Trees: Trees are likely to be removed as part of this proposal. All species of wild birds, their eggs, nests and chicks are legally protected until the young have fledged. A relevant planning condition is recommended.

7.74 It is also recommend that a condition requiring a Construction Environmental Management Plan (CEMP) be submitted.

7.75 Vegetation Clearance: As a planning condition, when vegetation is to be cleared or significant works are to be undertaken to the river bank or walls (including crevices in walls) or within 10 metres of the top of the river bank, then pre-construction surveys for legally protected and priority species to include kingfisher, otter, bats and badger are recommended. This recommendation is taken from the ecological survey dated June 2014. This condition will need to be applied before the pedestrian bridge to St Philips Marsh is installed.

7.76 Badgers: A condition requiring a pre-construction check for badger setts is recommended in the ecological survey dated June 2014. (in section 6.16 on page 24).

7.77 Nesting Birds: A condition in respect of nesting birds is recommended.

7.78 Landscaping: Landscaping of the site should predominantly employ native species of local provenance including berry and fruit-bearing tree, hedgerow and shrub species for birds and nectar-rich flowering plants for invertebrates. This should be secured by condition.

7.79 As a planning condition, *Cotoneaster* should be removed from the site and omitted from any planting proposals.

7.80 In accordance with Policy DM29 in the Local Plan, the provision of living (green/brown) roofs is recommended to provide habitat for wildlife. Living roofs also contribute towards Sustainable Urban Drainage Systems (SuDS). Page 117 of the Design and Access Statement refers to the use of the Arena's roof as a solar farm. Please note that living roofs can be integrated with photovoltaic panels.

7.81 The provision of green walls is recommended in accordance with Policy DM29 in the Local Plan. The use of native species such as ivy, honeysuckle, dog rose, old man's beard and common hop is encouraged to attract wildlife.

7.82 An ecological mitigation and enhancement strategy should be conditioned for the site. This should include the provision of bee bricks and living roofs.

BCC Arboricultural Officer

7.83 In principle, no objection to the proposals subject to updated proposals which incorporate improved tree planting and green infrastructure into the scheme. Tree planting proposals will need to be accompanied by tree pit specification which demonstrates that trees will be planted in a rooting environment that will sustain strong and healthy growth.

Arboricultural Impact Assessment (AIA)

7.84 It is noted that in respect of the Bristol Replacement Tree Standard (BRTS):

Group 3

10 *Ulmus sp.*@ 30 dbh = 30 trees
1 *Sorbus aucuparia* @30 dbh = 3 trees
5 *Betula pendula* @30dbh = 15 trees

Group 6

15 *Crataegus monogyna* @ 20dbh = 30 trees
15 *Acer pseudoplatanus* @20dbh = 30 trees

Total replacement trees required under the BTRS would be 108.

Officer Note: This replacement provision is to be addressed as part of an overall landscape plan for the site (see below).

Landscape Plan

7.85 This is a large scale development which must have trees that correspond in terms of size, stature and seasonal interest. The choice of species should be decided after consultation with a BCC Arboricultural Officer. Tree species choice is currently poor and if we are to have a resilient urban forest for future generations then we must ensure diversity. Currently London plane and lime trees are over represented in our city. Crack willow (*Salix fragilis)* as the name suggests is prone to breakage and is therefore not a good species choice adjacent to a road.

7.86 A condition of the planning permission is the aftercare of the trees for a period of five years. A management plan for this should include watering and checking the condition of cages and ties if appropriate. During this time any trees that fail should be replaced with a tree of the same size and species. Any application must include full tree pit specifications.

7.87 The car parks must include tree planting to break up the large expanses of tarmac. There is also space to plant more trees and shrubs on the banking adjacent to the access road off the A4 (Bath Road).

BCC Contamination

7.88 The proposed development is sensitive to contamination. The site was previously subject to industrial use for c150 years as a colour works and diesel engine depot. In the early 2000's a scheme of remediation was undertaken to treat groundwater and contaminated soils at the site. Whilst this went some way to treating the severity of the problem the validation report for the scheme outlined future remediation requirements for the buildings. The remediation that was undertaken could not foresee a requirement for soft landscaping at the site.

7.89 Since these works occurred screening values and industry led standards have changed and so a revised assessment of the site based on the present day criteria. As part of this we are aware some of the site has been subject to further investigation and the rest of the site will be investigated in March. Any drainage schemes for the site will need to take into account the site conditions.

7.90 To date there has been no opportunity to review the findings of the first investigation so we recommend relevant conditions. Once the findings are available we will be sharing them with the Environment Agency for comment with respect to controlled waters.

SUMMARY OF STATUTORY CONSULTEE'S COMMENTS

Highways England (HE)

7.91 HE welcomes the Framework Travel and Event Management Plan (FTEMP) but note that it is an evolving framework and this should be reflected in the addition of a relevant condition.

7.92 It is recommended that a Travel Plan Management Group be convened to meet quarterly. HE welcomes the suggestion of an extension to Park and Ride facilities and the use of Variable Message Signing.

7.93 A condition requiring the submission of a Travel Plan should also be attached to any permission for the mix of uses for the remainder of the site (15/06070/P).

7.94 There should also be the submission and approval of a Construction Traffic Management Plan.

Network Rail (NR)

7.95 Whilst there is no objection in principle to these two developments and NR is fully supportive of the proposal's they raise the following issues which are relevant to the safe operation of the railway during construction and on event days and the protection of NR's adjoining land as the main neighbouring property. Relevant conditions are recommended in relation to the following:

7.96 Crowd Management: A condition requiring a crowd management plan should be required.

7.97 Lighting: Any lighting associated with the development (including vehicle lights) must not interfere with the sighting of signalling equipment and/or train drivers vision on approaching trains. The location and colour of lights must not give rise to the potential for confusion with the signalling arrangements on the railway, as such the development should avoid producing any signal like lights (red, yellow or green).

7.98 Materials: Any reflective material used within the construction of any of the proposed buildings should not interfere with the line of sight of train drivers and the potential for glare or reflection of light from the panels that may impact upon signalling must be eliminated.

7.99 Fencing: If not already in place, the Developer/applicant must provide at their expense a suitable trespass proof fence (of at least 1.8m in height) adjacent to Network Rail's boundary and make provision for its future maintenance.

7.100 Drainage: No water should be discharged onto NR's land.

7.101 Safety: No work should be carried out on the development site that may endanger the safe operation of the railway or the stability of NR's structures and adjoining land.

7.102 Access to the railway: All roads, paths or ways providing access to any part of the railway undertaker's land shall be kept open at all times during and after the development.

7.103 Site layout: It is recommended that all development is located at least 2m from the boundary with NR land.

7.104 Environmental Issues: The design and siting of buildings should take into account the possible effects of noise and vibration and the generation of airborne dust resulting from the operation of the railway.

7.105 Landscaping: No trees should be planted closer than 1.5 times their mature height to the boundary fence.

7.106 Plant: Any scaffold which is to be constructed adjacent to the railway must be erected in such a manner that at no time will any poles or cranes over-sail or fall onto the railway.
Officer Note: The City Council will continue to work with NR as a key partner in the Enterprise Zone and addressing the issues NR have raised in this representation will form part of the ongoing discussion with them moving forward.

7.107 The external finish of the building has been amended as part of the evolving public art scheme for the building. As a by-product of this it is anticipated that any potential glare from the building will be reduce.

Historic England (HisE)

7.108 HisE welcomes the re-use of this site, and do not object to the principle of the uses proposed. The site is adjacent to the highly significant listed station complex at Temple Meads and has the potential to impact on its setting. Whilst the arena will be visible, we do not consider that it would have a significantly harmful impact on the setting the listed buildings. Of greater concern is the scale and proximity of the outline elements of the proposals (as illustrated) and we would recommend that consideration be given to reducing their scale/quantum.

7.109 In respect of the outline proposals for the site, there is concern about the scale of the residential development, and its potential looming presence when seen from the Station platforms. The prominence of these blocks is not helped by their uniform height/massing, both in relationship to each other and to the arena itself.

Environment Agency

7.110 Raise no objection in principle to the proposal subject to the inclusion of conditions and informative in any grant of planning consent relating to land contamination and the requirement for an environmental management plan.

Natural England

7.111 No comments on the applications.

Wessex Water

7.112 The applicant's drainage consultant has been in consultation with Wessex Water to agree suitable foul discharge arrangements and protection of existing apparatus which cross the development site. We support continued discussion on these matters.

7.113 Disposal of surface water from the site will be subject to agreement and approval of the LLFA and Environment Agency.

Avon and Somerset Police – Crime Reduction Unit

Comments on the full application for the arena 15/06069/F

7.114 Following on from consultation (including consultation with the counter terrorist unit) it is recommended that the Secure by Design (SBD) philosophy be embed where practical into the overall arena and public realm design.
Officer Note: The Design and Access Statement confirms that the Phase 1 development has been designed to meet the requirements of 'Secured by Design'.

Comments on the outline application 15/06070/P

7.115 In respect of residential development on the site, it is noted that Avon and Somerset Constabulary operates the Secured by Design (SBD) initiative. This promotes the inclusion of architectural crime prevention measures into new projects. Consideration should be given to applying for SBD certification as this will ensure minimum standards of physical security.

7.116 Approved Document Q1 of the Building Regulations 2010 for New Homes that came into force on 1 October 2015, creates security requirements in relation to windows and doors including those that are easily accessible. Windows and doors must reach the required PAS 24:12 certification and standards as set out in this document. Should the developer apply for SBD then the accreditation would exceed the requirements of Approved document Q.

7.117 It is noted that the Design and Access Statement confirms that the Phase 1 development has been designed with anti-terrorism measures, including Hostile Vehicle Mitigation (HVM) and it will be the operator's decision when the HVM will be operational and active.

Avon Fire and Rescue

7.118 Request that provision is made for five hydrants on site at the cost of the developer.
Officer Note: The Applicants have indicated that these will be provided.

Bath and North East Somerset

7.119 No comments received.

North Somerset Council

7.120 At this time, NSC are unable to offer a favourable recommendation in the absence of further information. If this information were not forthcoming, NSC would have no choice but to object to the proposals as the potential impact upon the NSC highway network and any mitigation necessary has not been adequately assessed at this stage.

7.121 It is noted that there are late night bus services along routes to North Somerset which will be available for attendees to use following an event. It would be helpful to understand if any capacity/demand work has been undertaken to ensure existing services are able to cope with a significant increase in travellers following an event

7.122 The Long Ashton P&R site is the largest serving Bristol with the TA suggesting it will be available for use by those travelling to an event at the Arena and be signed from M5 Junction 21. NSC support the use of the site, although are concerned that the TA does not include any analysis of the impact of any demand increase, particularly along the signed route to the site.

7.123 The TA reaches no conclusion on the potential impact on the NSC network despite suggesting that it will be used by those travelling to an event. Figure 8.1, which illustrates routes likely to be used by those travelling to an event, suggests that three key routes will run through NSC. Figure 8.2 suggests 6.6% of traffic will originate in NSC with a further 3.8% travelling through the NSC area from Sedgemoor. Therefore, when combined with the numbers of vehicles using the NSC P&R sites, some form of analysis of the potential impact seems prudent.

7.124 The TA and TEMP propose to set up a Stakeholder Group responsible for mitigating during events. Given the potential impacts on the NSC network the Council would wish to be represented on that group.

South Gloucestershire Council

7.125 South Gloucestershire is supportive of the proposed development in principle, and acknowledges the wider benefit that the development will bring to the population and economy of the West of England sub-region. However, there is concern that the impact of the development upon the highway network within South Gloucestershire must be fully assessed as part of the planning applications and that adequate mitigation is provided as part of the development. South Gloucestershire should be included as part of the stakeholder group.

OTHER CONSULTATION RESPONSES

Bristol Urban Design Forum

7.126 A presentation was made to a Panel the Bristol Urban Design Forum in advance of the submission of the application on 24 August 2015. Following on from which the Panel provided a written representation in which they unanimously congratulated the Council on the achievement of bring the development to this stage:
"Everyone will hope that the Arena will become a major civic presence in both Bristol's landscape and cultural life." (BUDF letter dated 28 August 2015, p.1)

7.127 It was noted that the Arena Island provide real accessibility challenges which extend well beyond its immediate location and therefore it is crucially important that the access is commodious as possible. It is therefore recommended that a travel plan (with access strategy) is provided.

7.128 Opportunities should be sought whenever possible to achieve off-highway pedestrian access through the Temple Meads area towards (an eventually directly into) the Arena site.

7.129 The proposed access through the island site is currently based on a pedestrian access from Bath Road descending 7m to an open plaza. This is a good public route through to the St Philips area will be constrained due to the incline on the footway. It was noted that there will be a 7m high retaining wall at this located which will create significant design challenges. The proposed staircase down to the plaza is broad and grand (in contrast to the narrow entrance from Bath Road).

7.130 In respect of the layout of the site, the Panel accepted the short term practicalities surrounding the reason for the temporary parking alongside the Arena, but concluded that its presence should be committed for only a very limited period. In combination with the proposed disabled parking, it was noted that these areas would remain empty for long periods of time and that would probably become unloved spaces that could well detract from the design quality of the scheme. It also monopolises a significant section of the river edge and reduce the impact of the approach to the St Philips Bridge. This eastern side of the plaza currently lacks clear

definition; the curved shape of the Arena, the audience gathering area long the service road, security fence and bridge approach need further refinement.

7.131 In respect of the design of the Arena, the Panel comment that the simple and sophisticated external appearance tends to belie the significant scale of the building. Concern was expressed that the translucent skin of the building is too simple, with the danger of a rather transitory appearance. The building will sit adjacent to the Grade I Temple Meads complex which "exudes a robust and exuberant character along with engineering excellence of Brunel and Digby Wyatt/ Francis Fox, which themselves incorporate much repetition of detail and incident that helps in defining scale" (BUDF letter dated 28 August 2015, p.3). The suggestion is that consideration should be given to the external skin and lighting to reflect this robustness.

7.132 Concern was expressed that the use of fair-faced black concrete for the base of the building would be harmful in the British climate.

7.133 Support the intention to achieve a BREEAM Very Good certification, with an aspiration to achieve Excellent.

Bristol Civic Society

7.134 Bristol Civic Society strongly supports the scheme.

7.135 Access to the site: The Society remains concerned about pedestrian access to the Arena, which will include those making the whole journey on foot, and those walking from bus stops or parked cars. The transport assessment pays due attention to journeys by other transport modes, but could do more for journeys on foot.

7.136 Bath Road – Three Lamps approach: The Society would like to be reassured that when the Arena opens this major pedestrian access, will be complete. The single Bath Road Temple Meads approach would cause crowd conflict and seriously inconvenience the patrons who choose not to use the Feeder Road Bridge.

7.137 Bath Road - Temple Meads approach: Improvements are also needed for those coming on foot from the north and west. It is not reasonable to assume that all patrons will use the Temple Greenway board walk route to/from Temple Meads. Not everyone approaching from the north on foot will come from Temple Meads. Others will approach on foot or on bikes along York Road and Mead Street from the west, and then cross the Bath Road via the two-step pelican crossing at the south end of Bath Bridge, joining the same pavement as those coming from the north. The pedestrian experience for those approaching the Arena from this direction will be awful in terms of 'pedestrian amenity', one of the potential issues identified in 7.3 of the Environmental Statement, alongside pedestrian delay and accident safety. The developer should fund a wider pavement, where possible, along the pedestrian route north along the A4 Bath Road towards Temple Meads. The Temple Gate proposals which were consulted on in 2015, will make highway changes north of the junction of Bath Road and Cattle Market Road, but those changes will not improve the pedestrian experience.

7.138 Safety: There will be times before or after a concert when the pavement along the Bath Road, north and south of the Arena, will be so crowded that there will be a high risk of people stepping into the path of the heavily-trafficked Bath Road. The 1-metre wide access to the Arena site for those coming from that direction will filter crowds exiting a concert, but will increase the risk of a large crowd assembling before a concert. The effect of the filter will be to build up a crowd on the pavement.

7.139 St. Philip's Marsh bridge: The Society would like to see a planning condition to require the applicant to bring forward a reserved matters planning application for the St. Philip's Marsh bridge before an agreed date.

Comments on Outline Application 15/06070/P

7.140 The Society regards the development of the Arena as part of the overall scheme to redevelop the whole of the recently extended Enterprise Zone.

7.141 A successful scheme to develop the remainder of the Island may evolve and suggest the form of development of the former Post Office parcel sorting office and so on outward to the wider Enterprise Zone. The Society suggests that the planning framework should set out two objectives; (i) the uses and conditions that would apply to buildings and (ii) the conditions that would apply to the spaces between the buildings.

7.142 In respect of use, it is recognised that the Council's promotional planning permission should be as flexible as possible.

7.143 Height and mass: The surrounding buildings should be lower than the height of the Arena to which they should be subservient.

7.144 Design: The permission should emphasise the requirements of BCS21 to encourage high quality design and materials.

7.145 The public realm on the island must be considered in the wider landscape of the whole of the Enterprise Zone of which it forms an important element and improving connectivity within the Zone must be the priority.

Bristol Tree Forum

7.146 It is noted that those trees that are lost are C grade and there are proposals to mitigate with 49 new trees.

7.147 Comment that it would be good to have some trees in the car parking area.
Officer Note: The Applicants have indicated that the approach taken has been to plant trees around the edge of the parking area to provide screening. It should be noted that the main parking area is temporary.

Sustrans

7.148 Sustrans supports the development of the arena as an important cultural and economic asset for the city. We are pleased to see the commitment to promoting access to the arena by walking and cycling. The detailed proposals within the application fall short of what we believe will encourage a high number of walking and cycling trips. In particular we have concerns about the directness and capacity of the proposed links to the arena, especially from Temple Meads station, the City Centre and Cabot Circus. Currently the proposed routes are indirect and we have concerns about the width of footways/cycle paths being adequate to cope with periods of high flows associated with events. We would like to see improved links from the Bath and Wells Roads, St Philips Greenway and the Bristol Bath Railway Path to encourage both door to door cycle trips and park and stride from alternative parking locations such as Avonmead Retail Park.

7.149 The site itself will need significantly higher levels of cycle parking than the 250 proposed. We would also like to see level access provided through the site to improve permeability and ensure that the arena contributes to the development of Bristol's walking and cycling network.

Bristol Cycling Campaign

7.150 Comment that the Arena will be a real asset to Bristol however current plans fail to provide for cycling in line with city policies and aspirations, in the following respects:

- This access from Bath Road should be 4m wide.
- Consider it essential that a ramped structure should be added from the A4 to the Arena Plaza
- The provision of 252 spaces for cycle parking is “inexcusable”. A minimum of 400 spaces should be provided.
- We consider the location of the cycle store to one side of the site and away from the desire lines will make them an unattractive option.
- Provision should be made to deliver the proposed widening of the existing footway along the length of Feeder Road to create a shared use path for pedestrians and cyclists.
- “It is regrettable and unhelpful that cycling and walking are considered synonymous in the Transport Assessment,”
- The staff travel plan in the Framework Travel and Event Management Plan (page 6.1) makes no mention of restrictions on staff car parking. This is a necessary complement to measures promoting cycling.
- The proposal should include visible signing and visual guides taking people all the way to the (expanded) cycle storage, and back.
- Provision should be made for future access from the north west corner of the site to Temple Meads station over the existing railway bridge using the unused section of line, or over a new bridge across to the site of the derelict Post Office building.

The Theatres Trust

7.151 The Theatres Trust supports this proposal for a 12,000 seat (Class D2) indoor arena, which will be of a great benefit to Bristol and support and enhance its ability to attract a wider range of cultural events and opportunities.

7.152 Whilst the arena has been mainly designed to host large scale concerts and events, much consideration has been given to the flexibility of the arena to provide a number of different performance formats and we support the way the arena can be arranged and sub-divided to accommodate large scale theatre productions with an audience of around 4000.

7.153 Appreciate the assessment of views undertaken in Chapter 7 of the Design and Access Statement to determine the best layout and seating arrangement that would suit the most performance formats.

St George Neighbourhood Partnership

7.154 Concerns expressed about the access from St George to the Arena and Temple Meads. In particular:

- Lack of direct Public Transport from St George to the Arena site
- Lack of Public Transport from Crews Hole area to Arena – there was a piece of work done with the N.P and UWE students on a route that would serve the community’s needs. Could funding be set aside to include this additional route in any proposals?
- Request to investigate feasibility of a park and float service via a new landing stage at St Anne’s to provide a commuter/leisure service to the Arena and Temple Meads for both St George, Crews Hole and St Anne’s residents and businesses. Also provide a new facility for the boating community in general as a secondary aim.

Totterdown Residents Environmental and Social Action (TRESA)

7.155 Generally supportive of the arena development" but objects to the Transport Assessment on the following grounds:

- Fails to recognise the importance of St Luke's Road as a route for pedestrians and cyclists.
- The restriction of not allowing a right turn from the A4 to Totterdown Bridge is acknowledged as a problem but no attempt is made to address this issue. Allowing a right turn at this point should be considered in order to reduce the pressure on the Bath Road at Three Lamps junction.
- Welcome the proposal for an improved pedestrian route to the arena terrace, but the whole route along the A4 Bath Road to Temple Meads train station needs to be improved.
- A Park and Ride facility is needed on the Wells Road e.g. at Whitchurch.
- Question why rail capacity figures are not in place within the TA.
- Question why no reference is made to the Severn Beach railway line.
- Concern about the impact of additional traffic in Bath Road and Wells Road on air quality.
- Welcome the acknowledgement of the potential to impact on-street parking in Totterdown and that "it would be an unacceptable nuisance risk without intervention". It is suggested that "the Arena developer would cover the cost of implementing parking controls in these areas prior to the Arena opening, or after (up to a period of 5 years). This will cover the cost of surveys, consultation, scheme design and sign fabrication/implementation. It is considered that parking management would be developed and agreed with residents. An appropriate sum will be agreed with the highway authority." We understand the developer is BCC. If so, would it not be usual for BCC to cover the set-up costs? This section of the report does not seem to imply any additional financial concessions to local residents. This should be clarified.
- Welcome the suggestion that "parking management would be developed and agreed with residents" and would welcome being involved in its development.
- It will be necessary to ensure that extra staff are monitoring any residents parking scheme when the arena is in operation. This should be guaranteed and included in the transport plan. The costs of extra staff should be met by the arena developer or operator
- With regard to existing residents parking schemes the transport assessment states: "it is considered these weekday times may need to be extended to 7:00pm, and Saturday restrictions included". TRESA's preliminary discussions/ survey with local residents suggest residents consider 7.00pm is too early and would suggest 8.00pm or 9.00pm for the Totterdown area.
- Agree with Highways England that a number of the transport mitigation measures require further development and greater evidence of commitment.
- Note that BCC will develop and implement a stakeholder communications plan that includes community engagement before work commences on site. TRESA, as the main organisation representing Totterdown residents, would welcome the opportunity to contribute to this group.

Comments received not related to the planning application

7.156 Enterprise Zone: This arena could offer local residents some real positive opportunities in terms of schemes and jobs which would not only help congestion but would make up for some of the other issues people are expected to put up with, but again there was no reassurance that local people would gain from this so called 'Enterprise' zone. Who exactly is this for if not local people and what is the point of having the arena so central if local people are not involved? I would ask for further clarification on how this will work - who will be approached to contribute, what are the '17,000' job opportunities please?

8.0 RELEVANT POLICIES

National Planning Policy Framework – March 2012

Bristol Core Strategy (Adopted June 2011)

BCS2	Bristol City Centre
BCS5	Housing Provision
BCS7	Centres and Retailing
BCS8	Delivering a Thriving Economy
BCS9	Green Infrastructure
BCS10	Transport and Access Improvements
BCS13	Climate Change
BCS14	Sustainable Energy
BCS15	Sustainable Design and Construction
BCS16	Flood Risk and Water Management
BCS17	Affordable Housing Provision
BCS18	Housing Type
BCS20	Effective and Efficient Use of Land
BCS21	Quality Urban Design
BCS22	Conservation and the Historic Environment
BCS23	Pollution

Bristol Site Allocations and Development Management Policies (Adopted July 2014)

DM1	Presumption in favour of sustainable development
DM7	Town centre uses
DM10	Food and drink uses and the evening economy
DM14	The health impacts of development
DM15	Green infrastructure provision
DM19	Development and nature conservation
DM22	Development adjacent to waterways
DM23	Transport development management
DM26	Local character and distinctiveness
DM27	Layout and form
DM28	Public realm
DM29	Design of new buildings
DM31	Heritage assets
DM32	Recycling and refuse provision in new development
DM33	Pollution Control, Air Quality and Water Quality
DM34	Contaminated land
DM35	Noise mitigation

Bristol Central Area Plan (Adopted March 2015)

BCAP1	Mixed-use development in Bristol City Centre
BCAP3	Family sized homes
BCAP6	Delivery of employment space
BCAP9	Cultural and tourist facilities and water-based recreation
BCAP20	Sustainable design standards
BCAP21	Connection to heat networks
BCAP22	Habitat preservation, enhancement and creation on waterways
BCAP23	Totterdown Basin enhancement
BCAP25	Green infrastructure in city centre development
BCAP28	New interchange facilities
BCAP29	Car and cycle parking
BCAP30	Pedestrian routes

BCAP31	Active ground floor uses and active frontages in Bristol City Centre
BCAP33	Key city spaces
BCAP34	Coordinating major development in Bristol City Centre
BCAP35	Bristol Temple Quarter

9.0 KEY ISSUES

9.1 IS AN ARENA ON THE APPLICATION SITE ACCEPTABLE IN PRINCIPLE?

Policy Context

9.1.1 Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires Local Planning Authorities to make planning decisions in accordance with the development plan unless material considerations indicate otherwise.

9.1.2 The National Planning Policy Framework (NPPF) was published in March 2012 and is a material consideration in the determination of planning applications. In order to ensure the vitality of town centres, the NPPF states that development plans should allocate a range of suitable sites to meet the requirement for a range of uses, including leisure.

9.1.3 Policy BCS2 of the Core Strategy (2011) states that Bristol City Centre's role as a regional focus will be promoted and strengthened. Development will include offices, residential, retail, tourism and entertainment and arts and cultural facilities. Policy BCS7 of the Core Strategy (2011) states that new uses which contribute to maintaining the vitality, viability and diversity of centres will be encouraged.

9.1.4 Policy BCAP1 of the Central Area Plan (2015) stipulates that new development in Bristol City Centre will be expected to contribute to the mix of uses in the wider area. Therefore a mix of new homes, employment and other uses will be sought as appropriate to the site and its context. Policy BCAP9 of the Central Area Plan (2015) requires that proposals for new cultural facilities in the city centre boundary will be encouraged. The policy states that a major indoor arena and complimentary leisure uses will be developed in Bristol Temple Quarter. It is a requirement of Policy BCAP35 that sites within the Bristol Temple Quarter will be developed for a wide range of uses, including:

A major indoor arena and complementary leisure uses;
At least 100,000 sq. m of net additional high quality office and flexible workspace;
Up to 2,200 new homes, including live/work space
Complementary retail and leisure uses
New walking and cycle routes to connect the development to the rest of the city centre and surrounding neighbourhoods.
Green infrastructure and public realm enhancements

Summary of relevant representations received

9.1.5 In respect of the principle of developing the application site for an arena, four representations were received in support of the proposal. Comments included the following:

Bristol "prides itself on a vibrant arts scene especially musically. However the one thing this city has lacked is a venue to host the world's biggest acts and I believe it's about time to build one to really put Bristol on the map."

"Bristol is a fantastic city and the provision of a modern music and events arena will bring it into line with the other major cities in the UK." "This will be the best thing to happen in Bristol

for a long time."

9.1.6 Three representations were received objecting to the principle of the development:

There will be some direct jobs created, but the majority of the jobs are temporary and subject to minimum wage zero hours.

Do not see how this will become a "destination", cut off from the rest of the city by the railway, and next to a tidal river with muddy banks at low tide. I think that is wishful thinking."

"No designated park and ride services for events of less than 9,000 capacity means people will be forced to drive. Rather than waste diesel transporting people into Temple Meads from parking spaces at Parkway, the arena could have been sited out there."
The impacts on the Easton and Lawrence Hill residents have not been properly taken into account.

Assessment

9.1.7 The development of the site as an arena is consistent with development plan policy and is acceptable in principle subject to all other material considerations.

9.1.8 The application site is the only suitable site for an arena within the TQEZ. In support of their application proposal, the applicants have undertaken a sequential test for the 12,000 seat arena that dismisses the ability of the only other two options to deliver the arena (the former Parcel Force site and land at Silverthorne Lane). It is clear that (subject to other material considerations) the application site is the only site within the area covered by policies BCAP9 and BCAP35 that is capable of accommodating an Arena and associated development together with office, residential and other development listed in BCAP35. In addition the site has been remediated in readiness for the development and a new access from Cattle Market Road has been constructed.

9.1.9 Therefore, the principle of an arena is fully compliant with development plan policies.

9.2 IS A MIXTURE OF USES COMPRISING RETAIL USE CLASSES (USE CLASSES A1, A2, A3, A4); OFFICES (USE CLASE B1); LEISURE (USE CLASS D2); RESIDENTIAL DWELLINGS INCLUDING AFFORDABLE HOUSING (USE CLASS C3); HOTEL (USE CLASS C1) AND STUDENT ACCOMMODATION (SUI GENERIS) ACCEPTABLE IN PRINCIPLE?

Policy Context

9.2.1 Refer to the above Key Issue.

Summary of representations received

9.2.2 One representation that related solely to the outline application was received. It seeks assurance that the detailed design of the mixed use development will include a restriction on buildings being taller than the arena building.
Assessment

9.2.3 In the interests of the proper planning and place making of the island site, it was agreed at pre-application stage that an outline application for the wider redevelopment of the application site should accompany the application for full planning permission for the arena.

9.2.4 The quantum of development for the outline planning application is set out above. It includes a mix of uses including affordable housing. All matters are reserved for subsequent approval. There is no developer currently involved. No detailed plans for this part of the application site have been submitted for consideration. Therefore your officers are only asking you whether (in principle) the site could be developed for the uses set out above. An outline planning permission would enable the Council to provide the market with increased certainty and would help in attracting prospective developers to the site. As the application has been the subject of Environmental Impact Assessment, it is important that a limit is placed on the total quantum of development allowed by the outline planning application and this is set out by a condition.

9.2.5 In support of their application, the Applicants set out the wider aspirations for the outline site and the wider area. They note that over time additional connections such as a link through the former Post Office site to Temple Meads can be provided alongside the further regeneration of the Temple Quay Enterprise Zone.

9.2.6 In respect of the proposed commercial floor space, Policy BCAP35 states that the Temple Quarter will become an employment-led area, and the indicative Masterplan proposals for the village adhere to this, identifying commercial floor space as the predominant use in the development. Policy BCS7 of the Core Strategy seeks to ensure that developments within the city centre will maintain and enhance active ground floor uses.

9.2.7 The indicative development proposal includes residential accommodation. It is noted that given the absence of on-site parking included within the development and the lack of outdoor private amenity space that the detailed scheme for the site is likely to comprise one and two bedroom flats rather than family sized accommodation. It is anticipated that the site could accommodate 80 dwellings.

9.2.8 The detailed proposals for the residential development will be considered at reserved matters stage and will be required to comply with the Council's design policies. Therefore the figure of 80 dwellings is not confirmed as part of this outline proposal. The Applicants state that the residential element of the proposals will be subject to affordable housing provision and the applicant have indicated that 30% affordable housing will be promoted (consistent with development plan policy for the south of the city). Again the details of this affordable housing will be addressed in detail at reserved matters stage.

9.2.9 The intention is to create an active area that is used throughout the year. This is important as the Arena will only be used approximately 150 days a year. It is anticipated that the detailed scheme presented at reserved matters stage will include a range of commercial uses. The illustrative Masterplan and indicative development proposed identify ground floors of the mixed use development buildings to be active. The Applicants states that it is "envisaged that building facades facing onto the principal routes (fronting the plaza and main road from the HCA bridge) will contain active ground floor uses" (Planning Supporting Statement, paragraph 8.13).

9.2.10 There are exceptional circumstances in this case to warrant a bespoke condition for the approval of reserved matters. Given the timescales involved in delivering the arena and that the operation of the arena will influence which developers would be interested in the site a longer timescale for the submission of the applications for approval of reserved matters is recommended, the application for approval of the reserved matters shall be made to the council before the expiration of five years from the date of the outline permission and should begin no later than the expiration of two years from the date of approval of the last of the reserved matters.

9.2.11 The application site is located in the city centre and in a sustainable location for future growth,

situated close to Temple Meads railway station. This outline application represents an important stepping stone in the realisation of development plan policy for this part of Bristol city centre and the TQEZ. The approach of securing a fairly loose outline approval for the remainder of the island site is a conventional one in these circumstances. For these reasons, your Officers are satisfied that they can support this application.

9.3 ARE THE PROPOSALS ACCEPTABLE IN TERMS OF PARKING, ACCESS, HIGHWAY SAFETY (INCLUDING THE SAFETY OF PEDESTRIANS AND CYCLISTS), TRAFFIC GENERATION AND CONGESTION?

Policy Context

9.3.1 In identifying Bristol City Centre's role as a regional focus, Core Strategy Policy BCS2 states that street design will give priority to pedestrian access, cycling and public transport. Policy BCS10 states that the Council will support the delivery of significant improvements to transport infrastructure to provide an integrated transport system. Part of that is making the best use of existing transport infrastructure through improvement and reshaping of roads and junctions where required to improve accessibility and connectivity and assist regeneration and place shaping. Policy BCS11 explains that development will provide, or contribute towards the provision of measures to directly mitigate its impact, either geographically or functionally, which will be secured through the use of planning obligations. Infrastructure, facilities and services required to support growth will be secured through a Community Infrastructure Levy (CIL) for Bristol.

9.3.2 The Bristol Central Area Plan Policy BCAP29 states that proposals for long-stay public car parking will only be acceptable where it would replace existing provision and would be appropriately located within the hierarchy of vehicular routes in the city centre. It states that long-stay private non-residential car parking should be limited to the essential operations needs of the proposed development.

9.3.3 TDM considers that to provide the maximum permitted level of parking on site (which would be 800 spaces) would not only require a substantial permanent car park several storeys in height but would also preclude the delivery of non-arena uses, were it to be provided on-site. More importantly, such a facility would attract more traffic to the arena site than could be accommodated on the surrounding highway network, given the access constraints of the site and the acute and substantial impacts this would have on the immediate area in terms of congestion, delay and safety impacts caused by conflict between traffic and pedestrians. . As a result it would be contrary to the policy objectives of BCC in reducing car reliance and promoting sustainable transport to demand the maximum parking standards.

9.3.4 Policy BCS10 states that development proposals should be located where sustainable travel patterns can be achieved, with more intensive, high density mixed use development at accessible centres and along or close to main public transport routes.

9.3.5 Policy DM1 of the Site Allocations and Development Management Policies emphasises the importance of sustainable development. Policy DM23 states development should not give rise to unacceptable traffic conditions and will be expected to provide safe and adequate access for all sections of the community within the development and onto the highway network. It should provide for appropriate transport improvements to overcome unsatisfactory transport conditions.

Summary of relevant representations received

Parking provision

9.3.6 Of the representations received, 21 expressed concern about parking provision:

"Having an Arena in Bristol will be excellent all round except for the lack of parking!!!!! Trains and buses do not always extend to the end of concerts etc. - as in Cardiff. People have no choice but to drive. There should be parking - multi storey - attached to the Arena and exits at various points so not all traffic will be coming out at one point causing congestion."

Concerned that people accessing the Arena from Bath Road by car might chose to park in the

Totterdown/ Knowle area instead, putting the residents out of parking space during major events. This could be prevented by a resident scheme, but I do not feel the cost should be borne by the residents.

It is "naïve" to think that arena users will use public transport. The only solution in my mind is to create a park & ride system with dedicated buses/coaches taking people directly to the arena from outside of the city.

South Bristol is already one huge traffic jam on most mornings/evenings and this Arena will only make it much worse.

The RPZ in Bedminster is now having an impact on Windmill Hill and this will be compounded by the Arena. Request for extended hours residents' parking for the area around Victoria Park.

A free residents' parking scheme needs to be in existence for people living in a surrounding radius of 1 mile.

In respect of servicing vehicles, concern is expressed that needs to be as much space as possible for the servicing of the site.
100% support for an arena but it is "ludicrous and short sighted" not to provide any additional parking – "however and very sadly it is typical of Bristol City Council when it comes to travel and traffic plans."

A car park in St Philips accessible from Albert Road, Feeder Road and Avon Street would divert traffic to the arena site that would otherwise use the Bath and Wells Roads and could be used on weekdays as a long stay commuter car park also easing the traffic jams that occur daily on those same roads. At the same time park and ride services need to be made more attractive by lowering the prices and introducing prices per car (rather than per person) to encourage car sharing.

"It is not good enough to state 'parking is already bad, therefore it is not our responsibility' - which seems to be the standard response to any new development. We had exactly the same response from planners regarding the Paintworks development and as predicted, our street is now full of people who used to park at Paintworks or from the Bath Road."
People in Totterdown cannot afford paying for an RPZ on top of expensive rents and council tax.

A residents' parking zone is unnecessary as concerts are in the evening and every evening all residential streets in the area are already filled with resident's cars.

Lack of parking in the south of the city.

Avon Meads should be taken into consideration as a potential parking option to reduce pressure on roads in the immediate vicinity of the Arena.

Disabled Parking: "I think that 45 parking spaces are too few for a 12,000 seater facility. Consequently, I wish to see the 'temporary car park' (capacity 200) retained, giving a total of 245 parking spaces. It is estimated that ~11 million people in the UK have some form of disability. This is roughly 1 in 6. This rises to 45% for pensioners! Extrapolating from these numbers, a 12,000 seater arena should cater for 2,000 disabled people."
There is no mention whether the 45 disabled parking spaces will be bookable and this amount of disabled parking is inadequate.

No mention of parking in the outline proposals (15/06070/P).

Access to the Island and the Arena

9.3.7 Of the representations received, 14 related to access to the Arena Island and the Arena itself: Traffic congestion is already a problem for local residents. What road improvements are required to accommodate the proposed development and how will the construction of these improvements impact local residents?

Concern that no consideration has been given to introducing a right turn from Wells Road at the Three Lamps junction.

Concern that access to the site from the south of Bristol is poor and that the A4 Bath Road and A37 Wells Road both need improving. Access for vehicles and pedestrians from Bath Road is poor.

The Avon cycle path should be improved.

"Big developments in the immediate area to the front and side of Temple Meads will impact on access to the Arena and the whole area should be considered together not in a piecemeal fashion depending on who gets there first."

One representation received stated that in order to improve access to the arena and alleviate congestion in the city; the Cut should be covered over and surfaced into a road drawing traffic away from the Old City.

Impact on St Luke's Road

9.3.8 Concern that the Transport Assessment does not include any improvements to St Luke's Road. Money should be spent to improve it when the arena opens.
St Luke's Road is currently affected by traffic at two peak periods 7am to 9.30am 3.30pm to 6.30pm. At non-peak periods, due to the current configuration of the road, drivers regularly speed along the road making it a terrifying experience to for pedestrians, cyclists and car drivers. This will certainly need to be addressed if traffic in the area is to increase.

Trains

9.3.9 GWR should commit to putting on more trains.

There appears to be insufficient reference to the Severn Beach Line. This route serves areas with a high student population who are likely to attend events at the arena – "With proper planning of longer trains at the right time hundreds of people could attend efficiently".
It is likely that regional users accessing the Arena Development by car will do so via the M32 and then access Stapleton Road train station to avoid parking in the car parks near the Arena.

The increase in traffic and associated car parking problems that will stem from this inevitable consequence appears not to have been adequately recognised and assessed in the transport assessment.

Buses

9.3.10 A dedicated bus service should be provided for the arena

Cycle parking

9.3.11 64 representations received indicating support for the representation of the Bristol Cycling Campaign and stating that “The Arena will be a great asset but should include adequate provision for the increasing numbers choosing to cycle. In particular recognising that Bristol Council's own policy is aiming for 20% cycling within only a few years.”

Concern was expressed that the walking and cycle routes from Totterdown are inadequate.

Taxi / Coach Drop Off Areas

9.3.12 “Temple Gate: The simplified junction greatly extends the distance that needs to be travelled by those coming from Bath Bridge Roundabout before they can make a turn to get back to Station Approach - it appears to require a loop round. The drop off area proposed on Friary Road appears much smaller than the existing short stay facilities at Temple Meads which are already inadequate.”

The ability to include older or otherwise less able ('mobility impaired') should be considered. The lack of drop off/pick up facility close to the entrance to the Arena is a serious defect, which also affects taxis. It appears to be suggested that taxis will operate from Temple Meads approach. This is a long walk, particularly in the rain, from the Arena.

General transport representations

9.3.13 Good to see the Arena website having live information concerning the availability of car parks. Concern about the impact of the proposal on the Bristol to Bath and Malago cycle paths. Further incentives and additional mitigation measures (especially for the largest events) should be explored and provided to encourage as many users as possible to access the Arena Development via sustainable means of transport. Concession tickets for those using public transport should be offered and other discounted tickets to ensure that the use of the private car is minimised.

Concern about the accessibility for wheelchair users both within and outside the site.

Assessment

9.3.14 Most of the representations that have been received on the application proposal relate to traffic congestion, access to the site and car parking.

9.3.15 Relevant Officers have been engaged in discussions from the outset of the evolution of the proposals to manage and mitigate the impact of this proposed development. This work will continue to progress following this Committee. Officers in TDM note that in transport terms, the degree to which the Arena development and therefore the City Council effectively addresses the above requirements is pivotal to the long-term impacts and therefore the success of the facility in serving not just the residents of Bristol but the wider South-West region. This is not just in the interests of the commercial success of the Arena in attracting activity and investment, but also the safety and wellbeing of the residents of the City of Bristol and other users of its highway network.

9.3.16 TDM note that some of the requirements will rely on separate processes, agreements and consultation with third parties and therefore cannot be subject to specific planning conditions. In addition, as these are applications submitted by Bristol City Council, no legal agreements can be secured. The Council cannot have an agreement with itself.

9.3.17 The provision of the arena needs to be considered in the context of the wider programme of strategic transport interventions across the city and wider sub region:

- The electrification of the Great Western Railway, the four-tracking of rail connections to the north of Temple Meads and the resultant increase in service frequency and stations as a result of the MetroWest 1 and MetroWest 2 package of rail services (2017-2021).
- MetroBus Improvements (2016-17). - a £200m package of investment in the West of England's bus network through the implementation of the MetroBus scheme and the new routes that will pass through the TQEZ.
- The TQEZ Revolving Infrastructure Fund (RIF) projects (2017). Transport DM note that the Council is investing £21m through the RIF to deliver specific improvements to enable improved access through the TQEZ (for example, major improvements to Temple Gate, the delivery of riverside walkways / cycleways and improvements to Cattle Market Road)
- The HCA Bridge access to the application site (2016).
- Temple Meads redevelopment (Timetable not known).

9.3.18 The Transport Assessment (TA) submitted with the application concludes that mitigating the "adverse highway operational effects of the large events" at the arena will require an 'enhanced Public Transport' approach. Simply adding to the parking stock will not deal with the traffic impact of visitors driving into the City Centre. In addition, traffic distribution will be across the city and therefore targeting specific highway improvements in one or two locations will not deal with the potential congestion either. Given this, the TA has examined the feasibility and likely effect of the following additional event-specific physical interventions:

- The operation of additional rail and park and ride services;
- The implementation of restrictive parking controls to reduce / remove on-street parking in residential and other sensitive areas;
- The implementation of safe facilities for picking up and dropping off movements;
- A safe and convenient environment for pedestrians and cyclists;

9.3.19 The comments of your Officers in TDM are that these measures must be successfully delivered in sufficient time to be effective upon the first event at the arena in order to reduce negative impacts of the development whilst satisfying the key transport policy objectives for the site and the wider city.

Parking and access to the site (the worst case scenario)

9.3.20 Current guidance on Transport Assessment requires that the worst-case transport scenario is assessed in order to avoid the impacts of the development being underestimated. The assessment therefore assumes that in this situation, 80% of people attending an event at the arena will be a car occupant, only 4% will come by train and only 5% will come by bus. This assumption is therefore based on the current situation whereby none of the above transport interventions are in place. That means that for a 12,000 attendance event, 9,600 visitors would arrive by private car. Taking into account surveys for other arenas (Manchester, Leeds and Nottingham) the average car occupancy for a 12,000 capacity evening event would be 2.4 people. Therefore, following reductions for linked trips and drop offs, in the worst-case scenario, a total of 3,520 additional vehicles are forecasted to require parking.

9.3.21 During 2015, a detailed analysis of the parking provision within 20 minutes walking distance of the application site was undertaken. This revealed that there are 6,300 parking locations, comprised of around 5,000 parking bays in existing major car parks. 700 bays in secondary

car parks and a further 600 bays within the St Philip's Marsh area. The major car parks are listed in Appendix D of the Applicant's Transport Assessment and include Cabot Circus, Broadmead and Nelson Street car parks. This assessment did not take into account the residential areas of Windmill Hill, Totterdown, Knowle, The Dings and Arnos Vale as it is clear that these areas will require event-day or other such parking restrictions and therefore not available to arena visitors.

9.3.22 On weekday evenings it was surveyed that in existing major car parks, parking demand reduces from 70% to 26% between 16:30 and 19:30. On a Saturday this demand reduces from 64% to 43% in the same period. Additional demand generated by the arena results in the greatest pressure resulting in an increase from 70% to 83% occupancy between 17:00 and 17:30 and 26% to 84% between 19:00 and 19:30. At the weekend, demand generated by the arena increases pressure for parking, with the maximum demand increasing from 43 to 98% of occupancy (between 19:00-19:30) across all car parks.

9.3.23 Traffic modelling indicates that the vast majority of visitors (44%) will use the strategic highway network to enter Bristol via the M32. Closer to the application site, traffic disperses and the worst-case projections are that the most severe impacts will be along Bond Street in both directions, Temple Gate and Avon Street in a southbound direction, along York Road and Redcliffe Way and Feeder Road in an eastbound direction.

9.3.24 TDM agrees with the Applicant's Transport Assessment that there will be the following impact on transport in the area resulting from this development:

9.3.25 The arena will generate a significant (86%) of car trips from outside of the Bristol City Council area. For trips to the arena by all modes, 48% will originate from within the West of England (former Avon) area.

9.3.26 A worst-case assessment has been provided which predicts that, without intervention, 80% of arena visitors (for an evening event) will travel by car. This amounts to a maximum worst-case highway demand for a further 3,500 arrivals for a major evening event and roughly a third of this figure for a daytime event across the three hours prior to an event commencing.

9.3.27 The highway network will struggle to accommodate the impact of this increase in traffic, whilst during weekend events there will be significant competing pressures upon city centre car parking which is likely to intensify further during peak periods of demand in November and December.

9.3.28 The available space within which to increase the capacity of the highway network for additional private vehicle traffic is extremely limited. Correspondingly, such an increase in network capacity in one location would encourage a greater level of vehicular traffic than could be accommodated elsewhere on the highway network to the detriment of more sustainable means of transport and environmental quality.

9.3.29 The submitted assessment indicates that 72% of vehicular trips are forecasted to approach central Bristol using one of the following routes:

a. A4 Portway & A370 Brunel Way (16.4%)

b. M32 (44.3%)

c. A4 Bath Road (11.2%)

9.3.30 The TA findings forecast that the above routes will be subject to an additional demand of just under 2,600 additional vehicles entering central Bristol between 16:00 and 19:00 for an evening event. For a 6,000-capacity Saturday afternoon event, this amounts to just over 900 vehicles.

Mitigation

9.3.31 As is set out in the representation from TDM, in order to address the increased traffic there is a requirement for the delivery of a range of improvements to provide viable alternatives to the private car. It should be noted that as the Council will continue to own and maintain the site, they will continue to oversee the implementation, management and mitigation measures, often in collaboration with other agencies and operators. In the light of this, these planning applications must be seen in the context of ongoing work with the aim of securing transport improvements for the arena and the wider area. This work will continue up to and beyond the opening of the arena, in the event that Members agree to grant planning permission.

Rail Improvements

9.3.32 The overwhelming requirement for the arena to achieve maximum accessibility by non-car modes is for improvements to rail access to the site. The representation of TDM sets out in detail the various improvements to rail connectivity that will be required to mitigate the impact of the arena on the city.

9.3.33 Currently it is noted that timetables indicate that the following locations have no rail connection later than 22:30 on a weekday evening: Bristol Parkway, Gloucester, Cheltenham, Swindon, Chippenham, Warminster, Salisbury, Weymouth and Dorchester. The Arena operators have indicated that the earliest curfew for an evening event is 22:30. So visitors from these locations will be unable to travel back home on the train from a weekday event. The last train to Cardiff/ Newport leaves at 22:55 on a weekend. There is a wait to 01:37 for the very last train on a weekday.

9.3.34 The planning system is unable to secure the provision of addition rail services as a direct condition of this application. Nevertheless, the Arena Project Team, GWR and Network Rail have met to find a means of securing improved rail provision and GWR have confirmed the following:

"GWR shares in principle the BCC aspiration for there to be later last trains from Bristol Temple Meads to accommodate passengers leaving the venue after evening events. Services between 2300 and 0000 are clearly essential to make this realistic.
…There are current services to both Weston and Bath that would, with some possible strengthening, accommodate the likely demand for homeward travel from the Arena development on week nights.
…Whilst GWR is willing to run additional services, subject to the necessary approvals, the costs of doing so must be fully covered and a number of constraints understood. These include the availability of track access, rolling stock and train crews, and the cost of operation.
…The introduction of Super Express Trains from 2017 brings with it the requirement to run empty trains at end-of service from Bristol Temple Meads to Stoke Gifford depot.
…The independent analysis has highlighted that there is a real possibility of utilising one of these as a high capacity late evening service to Bristol Parkway, which could act
as a Park & Ride hub for the M4 and M5 corridors and parts of northern Bristol.
…GWR will be pleased to undertake this analysis as plans for the Arena operations are finalised. In the meantime I can assure you that the impact of the BCC Arena development on rail service demand is now very much a part of the company's future timetable and resource planning process."

9.3.35 The submitted TA suggests, following discussions with GWR that an arena-specific rail connection could accommodate up to 1,260 passengers through the provision of two 9-car services, each accommodating 630 passengers, running between Temple Meads and Bristol Parkway, as described above.

9.3.36 Taking into account the assumed car occupancy of 2.4 passengers referenced earlier, a late-running rail service to Bristol Parkway could effectively remove 525 peak period vehicle trips from the

highway network (This figure increases to 1,165 when bus-based Park and Ride services figures are added). This equates to a 23% mode-share reduction in private car occupants. For this to be effective there is a requirement for there to be available car parking at Parkway. South Gloucestershire have requested in their representation that further work is undertaken on the impact of the proposal on Parkway is shared with them and that proper interactive signage is included. There is therefore a need for further discussion with South Gloucestershire Council once it is known that GWR are able to provide additional rail services.

9.3.37 In respect of rail connectivity with Portway, it is noted that the adopted Joint Local Transport Plan and Bristol Local Plan both refer to the opportunity for a railway station connected with the Council's existing Park and Ride site. TDM note that your Officers are pursuing the opening of a station in this location with Network Rail through the Governance for Railway Investment Projects (GRIP) process and while this is unlikely to be operational in time for the arena opening, the demand generated by the arena will be an important factor in future discussions.

9.3.38 TDM conclude their commends on rail provision by noting that, whilst it is not possible to secure such vital services at this moment in time, there are encouraging signs that the rail companies are taking this matter seriously with regard to the future provision of rail connections to the arena.

Bus connectivity

9.3.39 The second key piece of infrastructure to address potential increased congestion is improved bus connectivity. The TA confirms that 42% of arena trips are forecasted to originate from within the former Avon area. This accounts for 5,000 of spectators who could feasibly consider bus as an option subject to their being adequate connections and frequency. A variety of locations within this area are served from Temple Meads. However, certain locations within the urban area, including north west Bristol and north and east Bristol do not have a direct bus connection to Temple Meads area although the latter areas are accessible via buses serving Old Market, which would be a 15-20 minute walk from the arena site. Taking this into account it is required that a condition to secure a Public Transport Strategy is implemented prior to the first concert at the venue which takes into account patterns of demand from the wider West of England and provides the appropriate infrastructure in support of this .

Park and Ride

9.3.40 The third piece of mitigation and a fundamental requirement for the arena scheme is the implementation of additional Park and Ride connections to coincide with arena events. Currently, the three Park and Ride sites do not operate in the evening. Following the trip generation and impact assessments detailed in their response, the requirement of TDM is that that Park and Ride evening services are provided to offer a realistic alternative to car use for the Arena. Following discussion during the consideration of these applications, it is recognised that all three of the City's Park and Ride locations (Brislington, Ashton Vale and Portway) have a role to play. A relevant condition to secure a Park and Ride Strategy associated with the operation of the Arena is required.

Pedestrian and Cyclist Access

9.3.41 The fourth aspect is to ensure the development fulfils its policy obligation to deliver a safe and accessible environment. This must be delivered through improved pedestrian and cycle access to the site. TDM recognises that this is a particularly difficult site to access at present and that substantial improvements are necessary in order to fulfil the above policy criteria. A pedestrian and cycle access from the A4 Bath Road forms part of the application proposal and it is proposed to secure this by condition and also the following measures:
- High quality permeability through the site for pedestrians and cyclists is non-negotiable and is required in order to be compliant with BCAP policy.

- The requirement for a Vehicle Restraint System (VRS) between Bath Road and the site and the need to provide adequate visual screening for VIPs within the service yard should be combined. This will maximise the usable width of this facility and avoid conflicts between users at times of peak demand.
- The supporting mechanism for this walkway must be approved by BCC's Structures team before a decision is made upon which type of supporting structure is to be used. To not do so risks future safety and maintenance liabilities for BCC.
- Measures to ensure the safety of pedestrians using and crossing Bath Road
- The upgrading and widening of the current footways along Albert Road, Stanhope Street, Victoria Road, Victor Street and Feeder Road to include resurfacing, reconstruction (where necessary), lighting and the provision of crossing points.

Cycling

9.3.42 The fifth requirement is to ensure that high quality cycle provision is implemented on site. As is recognised in the representations from interested parties (including Sustrans) and the representation from TDM, the provision of cycle parking remains unresolved. Provision is made for 232 visitor spaces and 20 spaces for staff. This is less than Development Plan standards. There will be a need for ongoing work to secure acceptable provision with additional areas of cycle parking submitted and agreed prior to construction.

Signage

9.3.43 Improved signage has a significant role to play in effectively way marking the arena in such a way as to encourage and safeguard non-motorised users accessing the site. Reference is made within the TA to the need to provide effective signage for the Arena in such a way as to encourage walking and cycling movements to and from the site, but also to ensure that such routes are safe, legible and avoid conflict, not just between non-motorised users and traffic, but also to minimise conflicts between pedestrians and cyclists. Currently, the routes surrounding the arena site are poorly defined and obstructed by busy roads or topography. In order to address this, a relevant condition is proposed.

Parking Restraint

9.3.44 The final piece of mitigation that has been assessed is parking restraint. TDM have confirmed in their representation that it will not be possible to contain all vehicle trips generated by the arena within bus or rail-based park and ride sites. Nor is it possible for every arena visitor to have access to direct bus or rail connections, particularly those travelling from locations further afield. They note that, as with other stadia and arenas, it is inevitable that motorists will attempt to park in the areas surrounding the application site often up to 20-minutes' walk away from the venue. The parking impacts associated with stadia in Bristol at Ashton Gate and at Horfield are well-documented and have been addressed in other planning consents and TDM believe this to be of similar importance for the areas that would be affected if no controls were implemented.

9.3.45 The Applicants has indicated that they are willing to address these matters through a series of additional parking controls that seek to eliminate arena visitor parking from a number of surrounding areas. The specific controls fall outside the planning process and are subject to further public consultation and separate legislation under the Highways Act. However a relevant condition to secure a strategy for the investigation, consultation and implementation of parking controls is recommended.

Transport Conclusion

9.3.46 Overall, a variety of transport interventions are being developed and these are to be secured

by conditions that form part of the recommendations on the applications. Given the requirement to work up specific mitigation measures over time with partner organisations, the conditions are written to ensure that work is progressed ahead so that these will be in place for the first concert at the venue. These conditions have been prepared in the knowledge that the Council is the project promoter and the transport authority. Members can therefore have confidence that the proposed conditions provide a robust framework for ensuring that the transport impact of the proposed development will be satisfactorily addressed.

9.4 ARE THE PROPOSALS ACCEPTABLE IN TERMS OF THEIR DESIGN, LAYOUT AND THEIR IMPACT ON THE CHARACTER AND APPEARANCE OF THE AREA?

Policy Context

9.4.1 NPPF paragraph 9 states that pursuing sustainable development involves seeking positive improvements in the quality of the built, natural and historic environment, as well as in people's quality of life, including replacing poor design with better. NPPF paragraph 17 states that a core planning principle is to always secure high quality design and a good standard of amenity for all existing and future occupants of land and buildings.

9.4.2 Development Management Policy DM29 requires new buildings to be designed to a high quality, responding appropriately to their importance and reflecting their function and role in relation to its public realm.

9.4.3 Proposals for new buildings will be expected to (amongst other things) be clearly organised in terms of their form and internal layout and circulation to reflect the hierarchy and function they will accommodate, the uses they will serve and the context they will address. It should incorporate opportunities for green infrastructure and incorporate exteriors and elevations that provide visual interest from a range of viewing distances.

Summary of relevant representations received

9.4.4 Three representations have been received with comments on the design of the proposed arena and wider island development. Concern about the bulk of the building and that steel rather than glass covering the arena is very unattractive. There is a risk that at certain times of day this will cause problems of glare and be hazardous for motorists.
Grassed seating terrace: Following rainfall this could easily become rather muddy in which case, although the seating itself is of hard material, the terraces could become unsightly and unpleasant to use.

9.4.5 In respect of the outline application (15/06070/P): The Phase 2 buildings should all be lower than the Arena. A reduced height for Phase 2 would reflect the adjoining topography to the west and would give the arena visual priority.

Assessment

9.4.6 Arising out of the representations received there are a number of key questions that need to be addressed in assessing the design of the proposed arena and the indicative wider mixed use proposals for the site.

Design of the arena (Phase 1) and indicative mixed use proposals (Phase 2)

9.4.7 The advice of your Officers (including Officers in the City Design Group) is that the design of the building is high quality and will create an iconic building for the city. However as is normal for a scheme of this scale and complexity, the materials to be employed in the construction will be refined as the detailed design evolves. Therefore as is normal practice, a condition

requiring the details of the materials to be employed in the construction is recommended. This is particularly important in the light of Network Rail's concern that any cladding materials should not distract train drivers.

9.4.8 Mindful of its proposed height and position on the Arena island site together with its relationship with the areas identified for Phase 2 development (15/06070/P), does the proposed arena respond appropriately to its surroundings, in particular Temple Meads Station, the river and Bath Road?

9.4.9 The assessment of your Officers is that the relationship between these elements is appropriate. The findings of the Environment Statement Visual Assessment are not in dispute and the application in its broadest configuration will provide a much needed development as set out in the planning policies on what is currently an important but underused site.

Public Realm and Landscaping

9.4.10 In respect of the public realm, of particular concern is whether Phase 1 (proposed Arena) and Phase 2 (outline mixed use development layouts create a good environment for pedestrians and cyclists? In particular, will the Arena Plaza, Arena 'Village', Arena Terrace and Arena Square work as an effective public open space and is the proposed landscaping acceptable?

9.4.11 As set out in the representation from Officers in City Design Group, there is a need for a landscaping condition to be attached to each permission to secure a high quality landscape for the site. It will be required to address the following:

- Making the most of the waterside environment, especially between the proposed St. Phillips Marsh footbridge and the HCA bridge currently under construction.
- The location and relationship between the proposed 45 disabled parking spaces and the plaza.
- The relationship of the cycle parking with the remainder of the site.
- The relationship between the Bath Road access and the Phase 2.
- Tree pits (size and provision for growing medium) planters and their relationship with the sustainable drainage for the site.
- The lighting strategy for the site.

Public Art

9.4.12 Consistent with the briefing document for the provision of public art within the scheme, an artist Jonas Dahlberg has been appointed to work up proposals for public art for the development. The Applicant's Design and Access Statement indicates why he was successful: "Through the interview process it was apparent that Dahlberg's interest in time and space could bring a unique perspective to the Arena site and its use both during and outside of the times when events will be taking place. The Arena must therefore function and contribute positively to the immediate area surrounding it during a range of very different moments in its 'life'." (Design and Access Statement, p.93)

9.4.13 At the time of the preparation of this report, the process of finalising exactly what the public art for the site will look like is incomplete. A presentation on how the public art might look has been presented to an appointed Art Advisory Group (that includes the Council's Public Art Officer). The presentation was well received and the cost for the suggested public art strategy for the site is currently being calculated by the Arena Project Team. Therefore for the purposes of these planning applications, it is recommended that relevant conditions are added to secure the required public art.

Impact on Temple Meads Station

9.4.14 Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 requires local

planning authorities to have special regard to the desirability of preserving listed buildings and their settings. Section 72 of the same Act requires local planning authorities to pay special attention to the desirability of preserving or enhancing the character or appearance of the conservation area. The case of R (Forge Field Society) v Sevenoaks DC [2014] EWHC 1895 (Admin) ("Forge Field") has made it clear where there is harm to a listed building or a conservation area the decision maker ''must give that harm considerable importance and weight."

9.4.15 Section 12 of the National Planning Policy Framework (NPPF) 2012 states that in determining planning applications, local planning authorities should take account of the desirability of sustaining and enhancing heritage assets, and the desirability of new development to make a positive contribution to local character and distinctiveness. It also states that when considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation, with any harm or loss requiring clear and convincing justification. Paragraph 132 of the NPPF states that significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. Further, Paragraph 137 states that local planning authorities should look for opportunities for new development within conservation areas and within the setting of heritage assets to enhance their significance and that proposals which preserve these elements should be treated favourably.

9.4.16 In this case the application site is located in proximity to the Temple Meads complex which is a Grade I listed. As is noted in the representation of the Bristol Urban Design Forum, the choice of materials and the lighting scheme for the proposed arena will be important in ensuring that the impact of it on Temple Meads station. While your Officers are satisfied that the applicants have submitted a scheme which includes an acceptable choice of materials and have provided information to suggest that an appropriate lighting scheme will be achieved, it is considered appropriate to add relevant conditions to require the submission of a lighting scheme and to provide a lighting strategy. This will assist in ensuring that the significance of Temple Meads is not undermined.

Phase 2 Spatial concept

9.4.17 It is not possible to confirm that the submitted spatial concept for the Phase 2 development is acceptable at this stage because it is not yet known how they will link with the Phase 1 development. All matters for Phase 2 are reserved for approval as part of reserved matters applications and accordingly at that future stage. It is worth noting that the absence of certainty at this stage is helpful because it affords future developers the maximum amount of flexibility moving forward with their proposals for the site.

9.5 WILL THE APPLICATION PROPOSALS HAVE AN ACCEPTABLE IMPACT ON SURROUNDING AMENITY, IN PARTICULAR IN TERMS OF IMPACT ON NOISE AND VIBRATION?

Policy Context

9.5.1 Policy DM35 states that development that has an unacceptable impact on environmental amenity or biodiversity by reason of noise will be expected to provide an appropriate scheme of mitigation. In assessing such a scheme of mitigation, account will be taken of location, design and the layout of the proposed development and the existing levels of background noise, and measures to reduce or contain generated noise, and hours of operation and servicing.

Summary of relevant representations

9.5.2 Three representations have been received expressing concern about nuisance to nearby residential areas simply as a result of the numbers of people accessing and leaving the arena site.

"As a local resident the arena will have a negative direct impact on my day-to-day life, in terms of extra pollution (traffic fumes, and noise), and in terms of my ability to access my own property and park my car near to my house."
Concern about the sheer bulk of the building as seen from the Bath Road.

Assessment

9.5.3 The advice of the Council's Pollution Control Team is that there are no amenity issues arising out of the proposals that could be supported as grounds for refusing this application. Although, in the light of the early stage the outline proposals have reached, it is considered essential to include a condition that further assessment work is undertaken. This is primarily to ensure that the amenity of neighbouring residents is safeguarded.

9.6 ARE THE PROPOSALS ACCEPTABLE IN TERMS OF THEIR IMPACT ON AIR QUALITY?

Policy Context

9.6.1 NPPF paragraph 124 states that planning policies should sustain compliance with and contribute towards EU limit values or national objectives for pollutants. They should take into account the presence of Air Quality Management Areas and the cumulative impacts on air quality from individual sites in local areas.

9.6.2 Policy DM33 states that development that has the potential for significant emissions to the detriment of air quality should include an appropriate scheme of mitigation which may take the form of on-site measures.

Summary of relevant representations received

9.6.3 The plans show plant rooms within the arena, and the sustainability chapter mentions the installation of CHP plant, however there is no assessment within the air quality chapter.
Assessment

9.6.4 The detailed comments of the Council's Air Quality Officer are set out above. There are a number of key stages in the development of the site that are particularly important in respect of mitigating the impact on air quality:

- Construction Phase
- Vehicle emissions
- Operational Impacts
- Temporary Combined Heat and Power (CHP)

9.6.5 In respect of the construction phase, particular emphasis is placed on the control of dust. To this end, it is recommended that various measures, including monitoring and provision of contact details, are included in a Construction Environmental Management Plan (which is to be secured by condition).

9.6.6 In respect of vehicle emissions, the air quality assessment predicts that during the 2 year construction period for Phase 1 of the development, approximately 28 daily HGV movements. The advice received that it is essential that the construction traffic management plan (CTMP)

ensures that HGV vehicle routing avoids using residential streets to access the site in order to minimise the potential impact of HGV.

9.6.7 The impacts of the predicted increase in traffic have been shown to be negligible at all receptor locations considered for both NO_2 and PM_{10} concentrations.

9.6.8 In respect of the combined heat and power plant (CHP), the applicant needs to provide additional information with regards to why, as a minimum, a basic screening assessment has not been carried out for the proposed CHP plant.

9.6.9 Overall, any impact on air quality can be adequately mitigated.

9.7 IS THE PROPOSED DEVELOPMENT SUSTAINABLE IN TERMS OF ITS LAND USE, LAYOUT, DESIGN AND CONSTRUCTION? HAVE THE PROPOSALS BEEN PLANNED OVER THE LIFETIME OF THE DEVELOPMENT TO LIMIT CARBON DIOXIDE EMISSIONS, AND TO PROVIDE RESILIENCE TO CLIMATE CHANGE?

Policy Context

9.7.1 NPPF Policy 96 states that in determining planning applications, local planning authorities should expect new development to comply with adopted Local Plan policies on local requirements for decentralised energy supply, unless it can be demonstrated by the applicant, having regard to the type of development, involved and its design, that this is not feasible or viable and to take account of landform, layout, building orientation, massing and landscaping to minimise energy consumption.

9.7.2 Core Strategy Policies BCS13, BCS14 and BCS15 set out the Council's key policies for climate change and sustainable development.

9.7.3 In terms of climate change, Policy BCS13 requires that development should contribute to mitigating and adapting to climate change and meeting targets to reduce carbon dioxide emissions through the design and use of resources in buildings, the use of decentralised renewable energy and sustainable patterns of development which encourage walking, cycling and public transport rather than journeys by private car.

9.7.4 Policy BCS14 requires that within heat priority areas, development should incorporate infrastructure for district heating and where feasible low-carbon energy generation and distribution. Development will be expected to provide sufficient renewable energy generation to reduce carbon dioxide emissions by at least 20%.

9.7.5 In respect of the outline proposals, the degree to which the detailed proposals comply with Policy BCS14 will be assessed at reserved matters stage.

9.7.6 Policy BCS15 requires that non-residential development achieve a minimum sustainability standard of BREEAM level "Very good".

9.7.7 Policy BCS16 is concerned with ensuring that development proposals incorporate flood risk mitigation measures where necessary.

Assessment

Climate Change

9.7.8 In accordance with the requirements of Policy BCS13, development should mitigate climate

change through measures including:

9.7.9 Policy BCAP20 requires development to meet BREEAM “Excellent”. The Sustainable Cities Team notes that the planning application is on track to meet this policy requirement and underline the importance of doing so. This can be done through the imposition of relevant conditions.

9.7.10 The submitted Sustainability Statement demonstrates that a range of measures are incorporated to mitigate and adapt to climate change and it is accepted by the Council’s Climate Change and Built Environment Co-ordinator that the building itself is sustainable.

Sustainable Energy

9.7.11 Policy BCS14 requires that within heat priority areas, development should incorporate infrastructure for district heating and where feasible low-carbon energy generation and distribution. Development will be expected to provide sufficient renewable energy generation to reduce carbon dioxide emissions by at least 20%.

9.7.12 The application proposal incorporates measures that it is predicted will reduce these emissions by 11% through the inclusion of energy efficiency measures. The Applicants have indicated that “an array of PV panels on the roof the arena” will reduce carbon dioxide emissions from the development’s residual energy use by 21% and help move the building towards carbon neutrality. In addition, 23% will be achieved following the inclusion of onsite renewables (ES, para. 11.6.3).

9.7.13 The application proposal incorporates measures that it is predicted will reduce these emissions. The Sustainable Cities Team has confirmed that the development will meet this requirement.

Sustainable Design and Construction

9.7.14 It is noted that the application proposal is on track to achieve BREEAM “Excellent”. Although, as is noted in the representation above, there may be scope to achieve more credits in a variety of areas such as water consumption and the use of energy efficient equipment.

9.7.15 At the time of the application submission the material efficiency study had not been started. Such a study will inform the choice of conditions for this project. The materials to be employed are to be secured by condition.

9.7.16 A number of representations have been received (including one from the Sustainable Cities Team) expressing concern that a green roof has not been employed. The materials to be employed are to be secured by condition and there is therefore the opportunity to revisit this at a later date.

9.7.17 In respect of Bream for Communities, the undertaking of Bream for Communities is fully compliant with policy and the current trajectory of achieving excellent is commendable, although it is recognised that much of the detail is still to be confirmed.

Flood risk

9.7.18 In respect of Policy BCS16, as has been indicated, the site is designated as being within Flood Zone 1 where there is low probability of flooding.

9.8 ARE THE PROPOSALS ACCEPTABLE IN TERMS OF THEIR IMPACT ON ECOLOGY?

Policy Context

9.8.1 Policy DM19 states that development which would be likely to have any impact on habitat, species or features, which contribute to nature conservation in Bristol will be expected to be informed by appropriate survey and assessment of impacts and be designed and sited, in so far as practicably and viably possible avoid any harm to identified habitats, species and features of importance. This is reinforced by Central Area Plan Policy BCAP22 which states that development adjacent to waterways will be expected to preserve and enhance the existing biodiversity and sustainable drainage role of the waterway, its banks and immediate environs through the protection and enhancement of existing habitats and the creation of new habitats. Increased lighting or high levels of noise that could result in harmful impacts to existing habitats will not be permitted.

Assessment

9.8.2 The comments of the Council's Nature Conservation Officer are set out above. Consistent with development plan policy, an ecological mitigation and enhancement strategy for the site is recommended. Various enhancement measures are recommended in the Nature Conservation Officer's comments including the provision of, for example, bee bricks and living roofs.

9.8.3 In order to protect bats a dark corridor will also need to be maintained between the common pipistrelle bat roost and the River Avon. In order to protect badgers, a condition requiring pre-construction checks for badgers is recommended.

9.8.4 It is noted that significant vegetation clearance is required in order to deliver development on the site and relevant conditions are recommended.

10.0 OVERALL CONCLUSION AND RECOMMENDATIONS

10.1 The delivery of the Arena will create a major destination within the TQEZ, the city of Bristol and the South West Region. It will be an iconic building that will create both a strong civic presence and a dynamic building that will respond positively to its surrounding landscape.

10.2 Together, the detailed proposals for the Arena and the outline proposals for the remainder of Arena Island will deliver the positive regeneration of a brownfield site in the centre of the city.

10.3 In respect of the full application for the Arena, relevant conditions are recommended to secure a range of measures that will support the development and assist in the delivery of improvements to the wider area at the appropriate time. It is recognised that the recommended conditions reflect the additional work (particularly in respect of the transport mitigation and operational requirements) that are required as development emerges on the site and in the wider TQEZ. Members should have confidence that the proposed conditions create a proportionate but robust framework for the detailed delivery of mitigation measures, over time and in liaison with partner organisations, that will provide the necessary mitigation measures and monitoring in relation to the planning issues raised. In addition to this, Members should have regard to the fact that the Council also has the roles of project promoter and transport authority in this case. Members should note that the Council will be the owners and developers of the site and custodians of the area once the scheme is built out, that there can be confidence that this work will continue to completion.

10.4 The outline application must be seen in the context of the wider redevelopment of this part of

the city. It represents an important stepping stone in the realisation of the Core Strategy objectives for this part of Bristol city centre (Policy BCS2). The city centre is the cultural and economic heart of the city. The application site is located in the city centre and in a sustainable location for future growth, situated close to Temple Meads railway station. The outline mixed-use proposals, when taken together with the detailed proposals for the Arena, deliver a framework for the future comprehensive development of the Arena Island.

10.5 The applications proposals comply with development plan policy and in the absence of material considerations to outweigh this policy compliance, they can be supported and planning permission should be granted for both.

11.0 Community Infrastructure Levy

11.1 This development is liable for CIL. The CIL rate for this type of development, as set out in the CIL Charging Schedule £1,551,354.91

11.2 Please note that at the present time, this figure should be treated with caution, as clarification may be required on the figures provided, there may be amendments to the scheme, and the BCIS 2016 figure may yet be adjusted. These could all impact on the level of CIL.

RECOMMENDATIONS

(A) Planning application no. 15/06069/F

RECOMMENDED GRANT subject to planning conditions

Time limit for commencement of development

Full Planning Permission

1. 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 Conditions

Further details of the Arena Building before relevant element started

2. Notwithstanding the submitted documents, detailed drawings at the scale of 1:5 and 1:20 scale and sample panels (where appropriate) 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.

   a) Drum – design of the external cladding(at suitable scale) incorporating the lead artist commission as identified in the draft Arena public art strategy including details of;
      a. facing materials, panelling, any manifestations/perforations;
      b. general arrangement of the external cladding with the gangways and lighting box;
      c. details of gangways, light box and fixings;
      d. junctions between panels of the finishing panels;
      e. details of coping and soffit.
   b) Glass middle layer – Details of
      a. panel arrangement;
      b. interface at the top (with drum) and bottom (with plinth);

c. doors including the jambs lintels and thresholds.

c) Plinth – Details of
   a. panel arrangement;
   b. interface with ground;
   c. coping;
   d. lintels/soffits, reveals/jamb and thresholds

d) Wall facing the railway line – Provide design and details for
   a. the fencing along the railway line;
   b. interface with ground;
   c. coping;
   d. lintels/soffits, reveals/jamb and thresholds

e) Roof
   a. any fall protection measures
   b. any bird control measured
   c. surface finish
   d. proposed mounting arrangement of any solar PV panels

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

Pedestrian / Cycle Access

Landscape

3. No development shall take place until there has been submitted to and approved in writing by the Local Planning Authority a scheme of hard and soft landscaping, which shall include indications of the following:

- All new tree planting.
- All existing trees and hedgerows on the land, and details of any to be retained, together with measures for their protection, in the course of development. The approved scheme shall be implemented so that planting can be carried out during the first planting season following the occupation of the building(s) or the completion of the development whichever is the sooner. All planted materials shall be maintained for five years and any trees or plants removed, dying, being damaged or becoming diseased within that period shall be replaced in the next planting season with others of similar size and species to those originally required to be planted unless the council gives written consent to any variation.
- Detailed design of the bike store and stepped seating.
- Details of hard surface finishes, any build up elements such as boundary walls to be approved on site.
- Manufacturer specification for any street furniture, tree protection, lighting fixtures, fencing.

Reason: To protect and enhance the character of the site and the area, and to ensure its appearance is satisfactory.

Landscape (Details)

4. Notwithstanding the documents provided in pursuance of condition 3 (above), detailed design of the design elements and structures within the landscape areas shall be provided and approved by the Local Planning Authority before the relevant parts of the work are commenced. The development shall be completed in accordance with the approved samples before the building is occupied.

a) Detailed design of:
   i. steps leading to podium level

ii. bike store
iii. stepped seating
iv. retaining walls
v. the fencing along the railway line;
vi. planters

b) Hard and soft landscaping plan confirming
i. surface finishes,
ii. tree pits
iii. interface of the paving with buildings, threshold etc.

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

Landscape (Samples)

5. Notwithstanding the documents provided in pursuance of condition 3 (above), samples of the materials to be used within the landscape areas shall be provided and approved by the Local Planning Authority before the relevant parts of the work are commenced. The development shall be completed in accordance with the approved details before the building is occupied.

a) Samples of (i) hard surface finishes and (ii) any build up elements such as boundary walls

b) Manufacturer specification for any street furniture, tree protection, lighting fixtures, fencing etc. including samples of the proposed finishes.

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

Foundation Design

6. No structural construction work in the area adjacent to the retained stone arches shall take place until a detailed design for the any remediation/stabilisation work needed together with a method statement for their construction has been submitted to and approved in writing by the Local Planning Authority. The development hereby approved shall only take place in accordance with the approved detailed scheme.

Reason: To ensure the preservation in situ of archaeological features of identified importance.

Public Art Strategy

7. Prior to the commencement of the development, a Public Art Strategy shall be submitted to and approved in writing by the Local Planning Authority. The Public Art Strategy which shall set out the process to be used to commission and integrate public art within the Arena building and across the wider Arena Island site. The Public Art Strategy shall also contain budget allocations, artist procurement process, a timetable for delivery of the various commissions, and details of the future maintenance responsibilities and requirements. The delivery of public art shall then be carried out in full accordance with the agreed Public Art Strategy unless otherwise agreed in writing by the Local Planning Authority.

Reason: to ensure the provision of public art in the landscape design and buildings and in pursuance of BCC's public art policy.

Public Artworks (individual commissions and designs):

8. Following the approval of the Public Art Strategy and prior to the commencement of each public art commission, or the design for the area where any public art is to be integrated (unless otherwise agreed in writing by the Local Planning Authority) details of the individual artwork commission(s) shall be submitted to and approved in writing by the Local Planning Authority. The public art works shall be implemented and completed in accordance with the approved details in accordance with the agreed timetable for delivery, unless otherwise agreed in writing by the Local Planning Authority.

Reason: to ensure the provision of public art in the landscape design and buildings and in pursuance of BCC's public art policy.

Arena Integrated work (Skin)

9. Detailed drawings of the following items shall be submitted to and approved in writing by the Local Planning Authority before the relevant parts of work are begun. The details thereby approved shall be carried out in accordance with that approval:

a) Commissioned Artwork for Arena Building (integrated)

The detailed drawings submitted shall be accompanied by:

1. A text outlining the commission proposed, the concept, and rationale.
2. The artists CV and full list of gallery/museum, exhibitions and past public realm commissions developed to date.

Reason: to ensure the provision of public art in the landscape design and buildings and in pursuance of BCC's public art policy.

Construction Environmental Management Plan

10. 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 plan must demonstrate the adoption and use of the best practicable means to reduce the effects of noise, vibration, dust and site lighting. The plan should include, but not be limited to:

1. Procedures for maintaining good public relations including complaint management, public consultation and liaison
2. Arrangements for liaison with the Council's Pollution Control Team
3. 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:
4. Construction delivery 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.
5. Deliveries to and removal of plant, equipment, machinery and waste from the site must only take place within the permitted hours detailed above.
6. 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.
7. Procedures for emergency deviation of the agreed working hours.
8. 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.

9. Measures for controlling the use of site lighting whether required for safe working or for security purposes.
10. Construction vehicular routes to and from site;
11. Expected number of construction vehicles per day;
12. Car parking for contractors;
13. Specific measures to be adopted to mitigate construction impacts in pursuance of the Environmental Code of Construction Practice;
14. A scheme to encourage the use of Public Transport amongst contractors;

Reason: In the interests of the amenities of surrounding occupiers.

Parking

11. Prior to commencement of the development, a strategy for the investigation, consultation and implementation of a series of parking controls shall be submitted and agreed in writing. This strategy should include but not be limited to:

i. Redcliffe, Bedminster East, Windmill Hill, Totterdown, Knowle, Arno's Vale, St Philip's Marsh, The Dings and Barton Hill with consideration of the following potential changes:
ii. The extension of time periods for existing parking orders
iii. The creation of new orders prohibiting parking in certain locations
iv. Proposals for event-related Residents' Only orders
v. Proposals for loading bans, coach / taxi facilities and the prohibition of short-stay pick-up / drop-off traffic.

Reason: In the interests of the proper transport planning of the site.

Bats

12. Development shall not commence until details of a scheme for the retention of the bats' roost and the retention of the bats' existing accesses or the provision of alternative new roosts or accesses, has been submitted to and approved in writing by the local planning authority. The scheme shall include a programme for the implementation of the development which minimises any impacts on bats including the provision of suitable voids or crevices for bats, bat boxes, bricks or similar, 'soft strip' demolition methods and measures to minimise light pollution. The development shall be carried out in accordance with the approved scheme or any amendment to the scheme as approved in writing by the local planning authority.

Reason: to enable the local planning authority to retain control over development in order to safeguard bats and their roosts which are specially protected by law.

Land Contamination

13. Prior to the commencement of development approved by this planning permission (or such other date or stage in development as may be agreed in writing with the Planning Authority), the following components of a scheme to deal with the risks associated with contamination of the site shall each be submitted to and approved, in writing, by the Local Planning Authority:
1. A preliminary risk assessment which has identified:
- all previous uses
- potential contaminants associated with those uses
- a conceptual model of the site indicating sources, pathways and receptors
- details of previous remediation works which have occurred at this site
- potentially unacceptable risks arising from contamination at the site.

2. A site investigation scheme, based on (1) to provide information for a detailed assessment of the risk to all receptors that may be affected, including those off site.
3. The site investigation results and the detailed risk assessment (2) and, based on these, an options appraisal and remediation strategy giving full details of the remediation measures required and how they are to be undertaken.
4. A verification plan providing details of the data that will be collected in order to demonstrate that the works set out in (3) are complete and identifying any requirements for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action. Any changes to these components require the express consent of the Local Planning Authority. The scheme shall be implemented as approved.

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.

Imported Materials

14. Unless covered by an Environmental Permit, prior the commencement of development the requirements for the importation of and/or reuse of fills, soils and other ground materials on site shall be submitted to and agreed in writing with and thereafter carried out to the satisfaction of the Local Planning Authority.

Reason: To ensure that risks from imported materials 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

Site Clearance

15. No clearance of vegetation or structures suitable for nesting birds including ledges on, crevices in and voids within the walls on the A4 embankment and crevices in walls alongside the River Avon, shall take place between 1st March and 30th September inclusive in any year without the prior written approval of the local planning authority. The authority will require evidence provided by a suitably qualified ecologist that no breeding birds would be adversely affected before giving any approval under this condition.

Reason: To ensure that wild birds, building or using their nests are protected.

Nesting Birds

16. Prior to commencement of development details shall be submitted providing the specification, orientation, height and location for built-in bird nesting and bat roosting opportunities integrated within new buildings or structures. This shall include twelve built-in bird and ten built-in bat boxes or bat tubes to include at least eight swift bricks. Half of the features should be suitable for summer roosting by bats and half of the features for hibernating bats. The recommendation on page 8 in the Addendum to Ecological Survey report dated August 2015 that built-in bat boxes, bricks or tubes which are integrated within new buildings or structures are used and that: “Externally attached boxes for trees or structures are not advised for this site, due to likelihood of removal or vandalism” shall be adhered to unless otherwise agreed in writing.

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. 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.

Reason: To ensure that wild birds, building or using their nests are protected.

Local Training

17. Prior to commencement of development a scheme for an employment and skills programme shall be submitted to and approved by the Local Planning Authority. The aim of the scheme is to increase the availability of work placements, apprenticeships and training within the construction phase of development hereby approved and thereby enhance opportunities for local people to access employment and skills training as a direct result of the development. The approved scheme should thereafter be implemented.

Reason: To increase availability of work placements, apprenticeships and training within the construction phase of development hereby approved and thereby enhance opportunities for local people to access employment and skills training as a direct result of the development.

Security and Counter Terrorism

18. Prior to the commencement of development of the arena, a Security and Counter Terrorism Strategy shall be submitted to and approved in writing by the Local Planning Authority. The approved details shall completed prior to the first concert at the venue.

Reason: In the interests of the security of the venue.

Litter and waste

19. Prior to the commencement of development of the arena, a scheme detailing the method of storage and disposal of litter and waste materials (including recycling facilities) shall be submitted to and approved in writing by the Local Planning Authority.

Reason: In the interests of the amenity of the site and to promote recycling.

Foundation Works Risk Assessment

20. Prior to foundation works commencing a 'Foundation Works Risk Assessment' must be submitted to and approved in writing by the Local Planning Authority. Works shall then be undertaken as agreed. The Risk Assessment will be expected to summarise detail of:
i) The process of the assessment, including the pollution scenarios that may occur using these techniques;
ii) The potential mitigation measures that may be appropriate;
iii) Proposals for any monitoring;

iv) Particular issues and uncertainties associated with the methods chosen.

Reason: To ensure the proposed development will not cause pollution of Controlled Waters.

BREEAM

21. No development shall take place until evidence that the development is registered with a BREEAM certification body and a pre-assessment report (or design stage certificate with interim rating if available) has been submitted indicating that the development can achieve the stipulated final BREEAM level. No building shall be occupied until a final Certificate has been

issued certifying that BREEAM (or any such equivalent national measure of sustainable building which replaces that scheme) rating (Excellent) has been achieved for this development unless otherwise agreed in writing by the Local Planning Authority. This Certificate shall be provided within the first six months following the first concert at the venue.

Reason: To ensure that the development achieves BREEAM rating level (Excellent) (or any such equivalent national measure of sustainability for building design which replaces that scheme) and assessment and certification shall be carried out by a licensed BREEAM assessor and to ensure that the development contributes to mitigating and adapting to climate change and to meeting targets to reduce carbon dioxide emissions.

Pedestrian / Cycle Access

22. No development shall take place until a general arrangement plan showing the following works have been submitted to and been approved in writing by the Local Planning Authority:

• The delivery of a 5m width pedestrian / cycle access between Three Lamps junction and the site. This can only be constructed following a formal Structural Agreement in Principle (AiP).

• The submission of a permeable cycle and pedestrian linkage through the arena site between Bath Road and the River Avon bridges on the north and eastern side of the site.

Reason: 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.

Highway Works

23. No development shall take place until a general arrangement plan showing the following works to the highway have been submitted to and been approved in writing by the Local Planning Authority

• The upgrading, widening and reconstruction (where necessary) of current footway / carriageway along Albert Road, Victor Street, Victoria Road, Chapel Street, Stanhope Street and Feeder Road where appropriate to incorporate the provision of crossing facilities and carriageway and drop-off / pick-up facilities for coaches and taxis.

• The implementation of improved / upgraded lighting in the above area where necessary.

• A scheme for the appropriate management of traffic in the above area through the provision of access and waiting restrictions to be secured as part of the TRO process.

The building hereby permitted shall not be occupied until the highway works have been completed in accordance with technically agreed engineering details.

Reason: 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.

Pre-occupation conditions

Public Transport Strategy

24. Prior to the first concert at the venue, a Public Transport Strategy shall be submitted and agreed in writing by the Local Planning Authority. This shall include the following details:

a) Confirmation of likely additional demand for regular bus services serving Temple Gate and Old Market;
b) Enhancements to frequency and capacity of services to coincide with arena events and associated thresholds to be confirmed.
c) Further detail on the capacity of existing infrastructure (i.e. stops) to accommodate additional services during peak periods of demand.
d) The installation of Real Time Passenger Information (RTPI) displays within the Arena Island site in a prominent location.

Reason: In the interests of the proper transport planning of the site.

Park and Ride Strategy

25. Prior to the first concert at the venue, an Arena Park and Ride Strategy shall be submitted and agreed in writing by the Local Planning Authority. The provisions of the approved Park and Ride Strategy shall be implemented upon the first major event at the arena, as defined by the following requirements to the satisfaction of the Council:

a) The proposed thresholds for the operation of each of the Park and Ride services at Brislington, Portway and Ashton Vale;
b) The location, frequency, timings and capacity of each Park and Ride service and the size/type of events to be served;
c) How the routes will be signed, marketed and Park and Ride usage encouraged through effective fare structures, incentivisation and the delivery of Variable Message Signage (VMS) on strategic approaches to Bristol;
d) Locations for the setting down and picking up of passengers within easy walking distance of the arena site;

Reason: In the interests of the proper transport planning of the site.

Event Management Strategy

26. Prior to the first concert at the venue, an Arena Event Management Strategy shall be submitted and agreed in writing by the Local Planning Authority. The Plan could include details of the following:

1. The implementation of specific Transport Environmental Management Plans (where appropriate), which take account of the following:

- The capacity of the event in question
- The type of audience (for example family shows)
- The occurrence of another major event at the same time (ie. Football matches, Balloon Fiesta)
- Unexpected situations occurring as a result of abnormal influences (ie. roadworks, motorway closure and accidents)

2. The formulation of a Travel Management and Stakeholder Group to undertake specific event planning and to include representatives from (but not limited to):

   - The Arena Operator, BCC Public Transport, Local resident / business groups, Cycling groups, Bus operators, GWR, Network Rail, Highways England, BCC Network Management, South Glos, North Somerset and B&NES councils, the emergency services and the appointed Traffic Management contractor.

3. On-site Event Management to include:

   - Safeguarding access to the arena for event-specific traffic and
   - emergency vehicles
   - Ensuring access for pre-booked disabled parking, pre-booked VIP
   - parking and proposed residential / employment uses
   - Prohibiting rogue / un-booked vehicles attempting to enter the site
   - Emergency procedures for safe evacuation
   - Restricting vehicle movements (other than for emergencies) at times
   - with high crowd numbers
   - Crowd management to ensure the safe and efficient flow of
   - pedestrians out of the venue.

4. Off-site Event Management Measures:

   - Temporary closure to traffic of Cattle Market Road between Temple
   - Gate and the Arena access bridge between 6pm and midnight for large
   - evening events.
   - Temporary closure to traffic of Albert Road between Feeder Road and Stanhope Street between 6pm and midnight for large evening events to allow for safe boarding / alighting of coaches and taxis in dedicated bays.
   - Retention of private access to businesses and residents
   - The protection of large numbers of pedestrians from live traffic (e.g. Bath Road)
   - The management of coach, taxi and general drop-off / pick up
   - movements, particularly along Albert Road, but also elsewhere, as appropriate.
   - Management of pedestrians between the site and Park and Ride boarding locations along Redcliffe Way.
   - Additional management of Park and Ride sites at Portway, Ashton Vale and Brislington, where applicable.
   - Crowd management at Temple Meads station
   - The effective enforcement of parking restrictions within areas subject to evening / event-day parking controls.
   - Liaison with BCC's traffic control centre to temporarily alter signals to allow emergency / VIP access to and from Bath Road access.
   - The effective use of Variable Message Signage (VMS) in conjunction with BCC's Network Management team.

Reason: In the interests of the proper planning of the site.

Travel Plan (Not submitted)

27. Prior to the first concert at the venue, a Travel Plan comprising immediate, continuing and long-term measures to promote and encourage alternatives to single-occupancy car use has been prepared, submitted to and been approved in writing by the Local Planning Authority. The approved Travel Plan shall then be implemented, monitored and reviewed in accordance with

the agreed travel Plan Targets to the satisfaction of the council.

- The Travel Plan will be required to confirm the following:

a) The appointment of and funding of a Travel Plan Coordinator

b) A timetable for preparation, implementation, monitoring and review.

c) The overall outcomes to be achieved by the travel plan; the performance indicators, targets and back-up measures to be applied where the travel plan is not meeting its targets

d) Confirmation of the measures to be implemented upon occupation to include the following:

- Secure cycle parking for visitors and staff
- Information strategy – to be distributed to staff from the first occupation
- Issuing of cycle equipment and discounts to staff
- A strategy for the incentivisation of rail, park and ride and bus use
- the installation of a large live real-time public transport information screen within the building and at the public plaza.
- Annual Arena Travel Surveys over a five-year period

Reason: In order to deliver sustainable transport objectives including a reduction in single occupancy car journeys and the increased use of public transport, walking & cycling.

Noise Insulation Measures

28. Prior to the first concert at the venue, a detailed scheme of noise insulation measures for the arena has been submitted to and been approved in writing by the Local Planning Authority. The scheme of noise insulation measures shall be prepared by a suitably qualified consultant/engineers. The approved scheme shall be implemented prior to the commencement of the use and be permanently retained thereafter.

The recommended design standards are as follows:

i) The Music Noise Level (dB LAeq,T) created by events inside the development and predicted at the façade of any noise sensitive receptor shall not exceed the Background Noise Level (dB LA90,T) pre development minus 10dbA, and

ii) Music noise in the 63 and 125Hz (dB Leq,T) octave frequency bands shall not exceed the Background Noise Level dB LA90 in that octave frequency band minus 3dB, and

iii) No nuisance shall be caused by any other activity relating to the operation and servicing of the facility.

A noise management plan shall be submitted and approved in writing by the Local Planning Authority Prior to commencement of the use hereby permitted.

Reason: In the interests of the amenities of surrounding occupiers

Fixed Plant

29. Prior to the first concert at the venue, an assessment to show that the rating level of any plant & equipment, as part of this development, will be at least 5 dB below the background level has been submitted to and approved in writing by the Council. The assessment must be carried

out by a suitably qualified acoustic consultant/engineer and be in accordance with BS4142: 2014-"Methods of rating and assessing industrial and commercial sound".

Reason: In the interests of protecting the amenity of neighbouring occupiers.

Details of Extract/Ventilation System

30. Prior to the first concert at the venue, details of the means of ventilation for the extraction and dispersal of cooking smells/fumes, including details of its method of construction, odour control measures, noise levels, its appearance and finish have been submitted to and been approved in writing by the Local Planning Authority. The approved scheme shall be installed before the use hereby permitted commences and thereafter shall be permanently retained.

Reason: These details need careful consideration and formal approval and to safeguard the amenity of adjoining properties and to protect the general environment.

Contamination Watching Brief Condition

31. If, during construction, contamination not previously identified is found to be present at the site then no further development (unless otherwise agreed in writing with the Local Planning Authority) shall be carried out until the developer has submitted, an amendment to the remediation strategy detailing how this unsuspected contamination will be dealt with

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.

Signage and way-finding strategy

32. Notwithstanding the submitted documents, a detailed signage and way-finding strategy for the Arena Island from the wider city shall be developed and delivered before the first concert at the venue in full compliance with and as part of the Bristol City Council's Legible City Framework including update to the wider mapping and signage infrastructure.

Reason: To ensure the signage and way-finding in in compliance with the city centre signage strategy.

Victor Street Footbridge

33. Prior to the arena being brought into use or at a stage agreed in writing with the Local Planning Authority, a footbridge linking the application site with the River Avon path leading to Victor Street shall be provided.

Reason: In the interests of increasing accessibility to the site.

Lighting

34. Details of lighting and a lighting assessment shall be submitted to and approved in writing by the Local Planning Authority before the first concert at the venue. This shall include a lux level contour plan, and should seek to ensure no light spill outside of the site boundaries. The lux contour plan should extend outwards to incremental levels of zero lux.

Any lighting created by reason of the development shall be designed so as not to cause interference with the amenity of the nearest residential properties. Artificial lighting to the development must conform to Obtrusive Light Limitations for Exterior Lighting Installations for Environmental Zone – E3 (existing residents) and zone E4 (Phase two residents) contained within Table 2 of the Institute of Light Engineers Guidance Notes for the Reduction of Obtrusive Lighting, GN01, dated 2011.

Reason: In the interests of protecting the amenity of neighbouring occupiers and to conserve legally protected bats and other nocturnal wildlife.

Post Occupation

Noise generated by plant and equipment

35. The rating level of any noise generated by plant and equipment as part of the development shall be at least 5dB below the pre-existing background level as determined by BS4142:2014 – "Methods of rating and assessing industrial and commercial sound."

Reason: In the interests of protecting the amenity of neighbouring occupiers.

Illumination of arena building facade from Bath Road

36. No advertisement or images shall be sited or displayed so as to:-
    a) endanger persons using any highway
    b) obscure, or hinder the ready interpretation of any traffic sign or signal
    c) Any structure or hoarding erected or used principally for the purpose of displaying
    d) advertisements shall be maintained in a condition that does not endanger the public.
    e) Where an advertisement is required under these Regulations to be removed, the site shall be
    f) left in a condition that does not endanger the public.

Reason: In the interests of the proper planning of the site.

List of approved plans

37. 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.

Note: A list of plans will be presented on the amendment sheet.

Advice Notes

1. In respect of Condition 10 (Construction Management Plan), 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.

2. If construction/demolition works of the A4 embankment structure] do not commence until after September 2016, an update survey for bats, including emergence/re-entry surveys and remote monitoring [of the A4 embankment structure], should be completed during spring/summer 2016. The emergence/re-entry surveys should also cover any crevices identified during the March 2015 embankment inspection as being suitable for roosting bats.

3. In respect of Condition 11, the full cost of the additional restrictions that are directly related to the arena will need to be met by the Arena project. This is likely to include, but no be restricted

to, the following costs which otherwise be borne by BCC's Transport division:

- Undertaking surveys
- Public Consultation
- Design work
- Traffic Regulation Orders (TROs)
- Implementation of restrictions including line-painting, signage
- Lighting and any adjustments to the highway e.g. Kerb adjustments
- The enforcement of restrictions that are operational during the course of an arena event.

4. In respect of Conditions 22 and 23, undertaking works in the highway will require a legal agreement with the Highway Authority and contact should be made with the Local Highway Authority at least 6 months in advance of commencing the works so that an agreement is completed prior to starting any works on the highway.

(B) Planning application no. 15/06070/P

RECOMMENDED GRANT subject to planning conditions

Reserved Matters

1. Approval of the details of all matters (access, appearance, landscaping, layout and scale) (hereinafter called "the reserved matters") shall be obtained from the council in writing before any development is commenced.

   Reason: This is outline permission only and these matters have been reserved for the subsequent approval of the Local Planning Authority.

Outline Permission

2. Application for approval of the reserved matters shall be made to the council before the expiration of 5 years from the date of this permission.

   The development hereby permitted shall begin no later than the expiration of 2 years from the date of approval of the last of the reserved matters to be approved.

   Reason: As required by Section 92 of the Town and Country Planning Act 1990 as amended by Section 51 of the Planning and Compulsory Purchase Act 2004.

Pre-commencement Conditions

Spatial Framework

3. As part of the first reserved matters submission, a spatial framework shall be produced by the Applicants (or their successors) to provide an indication of the following:

   - The heights of proposed buildings
   - Relationship with the Arena and Arena plaza
   - Transport Strategy, confirming parking, access and servicing of the entirety of the development by all modes of transport. This should conform with the following parking standards:

     a) C3 Residential uses – 0.5 car parking spaces per unit

b) B1 Office uses – 1 car parking space per 600sqm (as per TQEZ SUMP)
c) Other uses – minimal operational requirements, including disabled parking.
d) All uses - Cycle parking to be provided in a secure and covered location in compliance with the minimum standards contained within the SA&DMP.

The Transport Strategy shall include:

a) the multi-modal trip generation of the proposed development
b) Assessment / audit of surrounding routes for non-motorised users
c) the parking provision for the development in question
d) How the development will avoid conflict with arena movements.
e) Consideration of the need and delivery of a pedestrian / cyclist footbridge, linking
f) the non-arena uses directly to Temple Meads station, in the context of the delivery

The total quantum of development shall not exceed 19,000 sq m GEA. Within this overall quantum, the permitted uses shall be limited to the following ranges: Residential between 7,520 sqm. and 11,280 sqm. GEA; Retail A1/A2/A3/A4 between 700 sqm. and 840 sqm. GEA; office B1 between 6,560 sqm. and 9,840 sqm.

Thereafter, the development of the site shall be consistent with the approved details.

Reason: In the interests of the proper planning of the site.

Housing Mix Strategy

4. No development shall commence on a residential development on the site until details of the housing mix have been submitted to and approved in writing by the Local Planning Authority. The mix shall include affordable housing in accordance with up to date housing policy, including development plan policy. Thereafter the housing shall be completed in accordance with the approved details.

Reason: In the interests of securing appropriate housing for the site.

5. Prior to submission of any future Reserved Matters or Full Application for development the following shall be submitted:

e) A detailed masterplan for the wider site, confirming parking, access and servicing of the entirety of the development by all modes of transport;
f) Future development occurring within the phase two land (Ref: 15/06070/P) should conform with the following parking standards:
g) C3 Residential uses – 0.5 car parking spaces per unit
h) B1 Office uses – 1 car parking space per 600sqm (as per TQEZ SUMP)
i) Other uses – minimal operational requirements, including disabled parking.
j) All uses - Cycle parking to be provided in a secure and covered location in compliance with the minimum standards contained within the SA&DMP.

• The submission of a Transport Statement, confirming:
g) the multi-modal trip generation of the proposed development
h) Assessment / audit of surrounding routes for non-motorised users
i) the parking provision for the development in question
j) How the development will avoid conflict with arena movements.
k) Consideration of the need and delivery of a pedestrian / cyclist footbridge, linking
l) the non-arena uses directly to Temple Meads station, in the context of the delivery of other sites which may enable such a link in the future

Construction Environmental Management Plan

6. 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 plan must demonstrate the adoption and use of the best practicable means to reduce the effects of noise, vibration, dust and site lighting. The plan should include, but not be limited to:

1. Procedures for maintaining good public relations including complaint management, public consultation and liaison
2. Arrangements for liaison with the Council's Pollution Control Team
3. 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:
4. Construction delivery 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.
5. Deliveries to and removal of plant, equipment, machinery and waste from the site must only take place within the permitted hours detailed above.
6. 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.
7. Procedures for emergency deviation of the agreed working hours.
8. 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.
9. Measures for controlling the use of site lighting whether required for safe working or for security purposes.
10. Construction vehicular routes to and from site;
11. Expected number of construction vehicles per day;
12. Car parking for contractors;
13. Specific measures to be adopted to mitigate construction impacts in pursuance of the Environmental Code of Construction Practice;
14. A scheme to encourage the use of Public Transport amongst contractors;

Reason: In the interests of the amenities of surrounding occupiers.

Landscape

7. No development shall take place until there has been submitted to and approved in writing by the Local Planning Authority a scheme of hard and soft landscaping, which shall include indications of the following:

- All new tree planting.
- All existing trees and hedgerows on the land, and details of any to be retained, together with measures for their protection, in the course of development. The approved scheme shall be implemented so that planting can be carried out during the first planting season following the occupation of the building(s) or the completion of the development whichever is the sooner. All planted materials shall be maintained for five years and any trees or plants removed, dying, being damaged or becoming diseased within that period shall be replaced in the next planting season with others of similar size and species to those originally required to be planted unless the council gives written consent to any variation.
- Detailed design of the bike store and stepped seating.
- Details of hard surface finishes, any build up elements such as boundary walls to be approved on site.
- Manufacturer specification for any street furniture, tree protection, lighting fixtures, fencing.

Reason: To protect and enhance the character of the site and the area, and to ensure its appearance is satisfactory.

Landscape (Details)

8. Notwithstanding the documents provided in pursuance of condition 3 (above), detailed design of the design elements and structures within the landscape areas shall be provided and approved by the Local Planning Authority before the relevant parts of the work are commenced. The development shall be completed in accordance with the approved samples before the building is occupied.

c) Detailed design of:
   i. steps leading to podium level
   ii. bike store
   iii. stepped seating
   iv. retaining walls
   v. the fencing along the railway line;
   vi. planters

d) Hard and soft landscaping plan confirming
   i. surface finishes,
   ii. tree pits
   iii. interface of the paving with buildings, threshold etc.

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

Landscape (Samples)

9. Notwithstanding the documents provided in pursuance of condition 3 (above), samples of the materials to be used within the landscape areas shall be provided and approved by the Local Planning Authority before the relevant parts of the work are commenced. The development shall be completed in accordance with the approved details before the building is occupied.

a) Samples of (i) hard surface finishes and (ii) any build up elements such as boundary walls

b) Manufacturer specification for any street furniture, tree protection, lighting fixtures, fencing etc. including samples of the proposed finishes.

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

Bats

10. Development shall not commence until details of a scheme for the retention of the bats' roost and the retention of the bats' existing accesses or the provision of alternative new roosts or accesses, has been submitted to and approved in writing by the local planning authority.

The scheme shall include a programme for the implementation of the development which minimises any impacts on bats including the provision of suitable voids or crevices for bats, bat boxes, bricks or similar, 'soft strip' demolition methods and measures to minimise light pollution. The development shall be carried out in accordance with the approved scheme or any amendment to the scheme as approved in writing by the local planning authority.

Reason: to enable the local planning authority to retain control over development in order to safeguard bats and their roosts which are specially protected by law.

Land Contamination

11. Prior to the commencement of development approved by this planning permission (or such other date or stage in development as may be agreed in writing with the Planning Authority), the following components of a scheme to deal with the risks associated with contamination of the site shall each be submitted to and approved, in writing, by the Local Planning Authority:

1. A preliminary risk assessment which has identified:
- all previous uses
- potential contaminants associated with those uses
- a conceptual model of the site indicating sources, pathways and receptors
- details of previous remediation works which have occurred at this site
- potentially unacceptable risks arising from contamination at the site.

2. A site investigation scheme, based on (1) to provide information for a detailed assessment of the risk to all receptors that may be affected, including those off site.
3. The site investigation results and the detailed risk assessment (2) and, based on these, an options appraisal and remediation strategy giving full details of the remediation measures required and how they are to be undertaken.
4. A verification plan providing details of the data that will be collected in order to demonstrate that the works set out in (3) are complete and identifying any requirements for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action. Any changes to these components require the express consent of the Local Planning Authority. The scheme shall be implemented as approved.

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.

Imported Materials

12. Unless covered by an Environmental Permit, prior the commencement of development the requirements for the importation of and/or reuse of fills, soils and other ground materials on site shall be submitted to and agreed in writing with and thereafter carried out to the satisfaction of the Local Planning Authority.

Reason: To ensure that risks from imported materials 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

Site Clearance

13. No clearance of vegetation or structures suitable for nesting birds including ledges on, crevices in and voids within the walls on the A4 embankment and crevices in walls alongside the River Avon, shall take place between 1st March and 30th September inclusive in any year without the prior written approval of the local planning authority. The authority will require evidence provided by a suitably qualified ecologist that no breeding birds would be adversely affected before giving any approval under this condition.

Reason: To ensure that wild birds, building or using their nests are protected.

Nesting Birds

14. Prior to commencement of development details shall be submitted providing the specification, orientation, height and location for built-in bird nesting and bat roosting opportunities integrated within new buildings or structures. This shall include twelve built-in bird and ten built-in bat boxes or bat tubes to include at least eight swift bricks. Half of the features should be suitable for summer roosting by bats and half of the features for hibernating bats. The recommendation on page 8 in the Addendum to Ecological Survey report dated August 2015 that built-in bat boxes, bricks or tubes which are integrated within new buildings or structures are used and that: "Externally attached boxes for trees or structures are not advised for this site, due to likelihood of removal or vandalism" shall be adhered to unless otherwise agreed in writing.

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. 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.

Reason: To ensure that wild birds, building or using their nests are protected.

Foundation Works Risk Assessment

15. Prior to foundation works commencing a 'Foundation Works Risk Assessment' must be submitted to and approved in writing by the Local Planning Authority. Works shall then be undertaken as agreed. The Risk Assessment will be expected to summarise detail of:
i) The process of the assessment, including the pollution scenarios that may occur using these techniques;

ii) The potential mitigation measures that may be appropriate;

iii) Proposals for any monitoring;

iv) Particular issues and uncertainties associated with the methods chosen.

Reason: To ensure the proposed development will not cause pollution of Controlled Waters.

Lighting

16. Details of lighting and a lighting assessment shall be submitted to and approved in writing by the Local Planning Authority before the first concert at the venue. This shall include a lux level contour plan, and should seek to ensure no light spill outside of the site boundaries. The lux contour plan should extend outwards to incremental levels of zero lux.

Any lighting created by reason of the development shall be designed so as not to cause interference with the amenity of the nearest residential properties. Artificial lighting to the development must conform to Obtrusive Light Limitations for Exterior Lighting Installations for Environmental Zone – E3 (existing residents) and zone E4 (Phase two residents) contained within Table 2 of the Institute of Light Engineers Guidance Notes for the Reduction of Obtrusive Lighting, GN01, dated 2011.

Reason: In the interests of protecting the amenity of neighbouring occupiers and to conserve legally protected bats and other nocturnal wildlife.

Noise Insulation Measures

17. No concert shall take place until a detailed scheme of noise insulation measures for the proposed development have been submitted to and been approved in writing by the Local Planning Authority. The scheme of noise insulation measures shall be prepared by a suitably qualified consultant/engineers. The approved scheme shall be implemented prior to the commencement of the use and be permanently retained thereafter.

The recommended design standards are as follows:

iv) The Music Noise Level (dB LAeq,T) created by events inside the development and predicted at the façade of any noise sensitive receptor shall not exceed the Background Noise Level (dB LA90,T) pre development minus 10dbA, and

v) Music noise in the 63 and 125Hz (dB Leq,T) octave frequency bands shall not exceed the Background Noise Level dB LA90 in that octave frequency band minus 3dB, and

vi) No nuisance shall be caused by any other activity relating to the operation and servicing of the facility.

A noise management plan shall be submitted and approved in writing by the Local Planning Authority Prior to commencement of the use hereby permitted.

Reason: In the interests of the amenities of surrounding occupiers

Fixed Plant

18. Prior to the commencement of development, an assessment to show that the rating level of any plant & equipment, as part of this development, will be at least 5 dB below the background level has been submitted to and approved in writing by the Council. The assessment must be carried out by a suitably qualified acoustic consultant/engineer and be in accordance with BS4142: 2014-"Methods of rating and assessing industrial and commercial sound".

Reason: In the interests of protecting the amenity of neighbouring occupiers.

Fixed Plant Noise Limit

19. The rating level of any noise generated by plant & equipment as part of the development shall be at least 5 dB below the pre-existing background level as determined by BS4142: 2014-"Methods of rating and assessing industrial and commercial sound".

Reason: In the interests of protecting the amenity of neighbouring occupiers.

Details of Extract/Ventilation System

20. No concert at the venue shall take place until details of the means of ventilation for the extraction and dispersal of cooking smells/fumes, including details of its method of construction, odour control measures, noise levels, its appearance and finish have been submitted to and been approved in writing by the Local Planning Authority. The approved scheme shall be installed before the use hereby permitted commences and thereafter shall be permanently retained.

Reason: These details need careful consideration and formal approval and to safeguard the amenity of adjoining properties and to protect the general environment.

Contamination Watching Brief Condition

21. If, during construction, contamination not previously identified is found to be present at the site then no further development (unless otherwise agreed in writing with the Local Planning Authority) shall be carried out until the developer has submitted, an amendment to the remediation strategy detailing how this unsuspected contamination will be dealt with

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.

Signage and way-finding strategy

22. Notwithstanding the submitted documents, a detailed signage and way-finding strategy for the Arena Island from the wider city shall be developed and delivered before the first concert at the venue in full compliance with and as part of the Bristol City Council's Legible City Framework including update to the wider mapping and signage infrastructure.

Reason: To ensure the signage and way-finding in in compliance with the city centre signage strategy.

BREEAM

23. No development shall take place until evidence that the development is registered with a BREEAM certification body and a pre-assessment report (or design stage certificate with interim rating if available) has been submitted indicating that the development can achieve the stipulated final BREEAM level. No building shall be occupied until a final Certificate has been issued certifying that at least BREEAM (or any such equivalent national measure of sustainable building which replaces that scheme) rating (Excellent) has been achieved for this development unless the Local Planning Authority agrees in writing to an extension of the period by which a Certificate is issued. This Certificate shall be provided within the first six months following the first occupation of each building on the site.

Reason: To ensure that the development achieves BREEAM rating level (Excellent) (or any such equivalent national measure of sustainability for building design which replaces that scheme) and assessment and certification shall be carried out by a licensed BREEAM assessor and to ensure that the development contributes to mitigating and adapting to climate change and to meeting targets to reduce carbon dioxide emissions.

Sustainable Urban Drainage System (SUDS)

24. No development shall take place until a detailed design of surface water drainage for the site using sustainable drainage methods has been submitted to and approved in writing by the Local Planning Authority. The approved development shall be implemented in accordance with the approved detailed design prior to the use of the building commencing.

Reason: To ensure that the principles of sustainable drainage are incorporated into this proposal.

Public Art Strategy

25. Prior to the commencement of the development, a Public Art Strategy shall be submitted to and approved in writing by the Local Planning Authority. The Public Art Strategy which shall

set out the process to be used to commission and integrate public art within the Arena building and across the wider Arena Island site. The Public Art Strategy shall also contain budget allocations, artist procurement process, a timetable for delivery of the various commissions, and details of the future maintenance responsibilities and requirements (including any commuted sum for the care of art works). The delivery of public art shall then be carried out in full accordance with the agreed Public Art Strategy unless otherwise agreed in writing by the Local Planning Authority.

Reason: to ensure the provision of public art in the landscape design and buildings and in pursuance of BCC's public art policy.

Public Artworks (individual commissions and designs):

26. Following the approval of the Public Art Strategy and prior to the commencement of each public art commission, or the design for the area where any public art is to be integrated (unless otherwise agreed in writing by the Local Planning Authority) details of the individual artwork commission(s) shall be submitted to and approved in writing by the Local Planning Authority. The public art works shall be implemented and completed in accordance with the approved details in accordance with the agreed timetable for delivery, unless otherwise agreed in writing by the Local Planning Authority.

Reason: to ensure the provision of public art in the landscape design and buildings and in pursuance of BCC's public art policy.

Pre-occupation conditions

Travel Plans – Not submitted

27. No building or use hereby permitted shall be occupied or the use commenced until a Travel Plan comprising immediate, continuing and long-term measures to promote and encourage alternatives to single-occupancy car use has been prepared, submitted to and been approved in writing by the Local Planning Authority. The approved Travel Plan shall then be implemented, monitored and reviewed in accordance with the agreed travel Plan Targets to the satisfaction of the council.

The Travel Plan will be required to confirm the following:

a) The appointment of and funding of a Travel Plan Coordinator

b) A timetable for preparation, implementation, monitoring and review.

c) The overall outcomes to be achieved by the travel plan; the performance indicators, targets and back-up measures to be applied where the travel plan is not meeting its targets

d) Confirmation of the measures to be implemented upon occupation to include the following:

- Secure cycle parking for visitors, staff and residents
- The provision of car club vehicles to serve residents
- Information strategy – to be distributed to staff / residents from the first occupation
- Issuing of cycle equipment and discounts
- A strategy for the incentivisation of rail and bus use
- Annual Travel Surveys over a five-year period

Inclusion within the TQEZ Travel Planning Group.

Reason: In order to deliver sustainable transport objectives including a reduction in single occupancy car journeys and the increased use of public transport, walking & cycling.

Completion and Maintenance of Sustainable Urban Drainage – Shown on Approved Plans

28. No building or use herby permitted shall be occupied or the use commenced until the sustainable urban drainage scheme for this site has been completed in accordance with the submitted details. The sustainable urban drainage scheme shall be managed and maintained thereafter in accordance with the agreed management and maintenance plan.

Reason: To ensure that the principles of sustainable drainage are incorporated into this proposal and maintained thereafter.

List of approved plans

29. 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.

Note: A list of plans will be presented on the amendment sheet.

Advice Notes

1. In respect of Condition 6 (Construction Management Plan), 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.

APPENDIX – Summary of the Environmental Impact Assessment

	Summary of baseline conditions	**Summary of potential environmental effects**	**Summary of mitigation measures**	**Summary of Residual Impacts (impacts remaining after mitigation)**	**Key Conclusions**
Transport	Relevant surveys and consultation including traffic surveys, car parking surveys and discussion with transport operators.	Construction traffic – Potential for driver and pedestrian delay and amenity. Once the development is complete, it is noted within the EIA that: "By the time the development proposals open, the existing highway network will be very different to its current form. As such the future committed view of the highway network should form the reference case for comparison purposes". This includes: - Alterations to Temple Gate - Temple Greenway scheme - MetroWest - MetroBus It is noted that the Arena proposals do not have a constant	The requirement to prepare a Construction Traffic Management Plan (CTMP) secured by condition. Key development mitigation includes: - P&R extension - On street parking controls - Coach drop-off and pick up - Taxi drop-off and pick up - Signing and Way finding - Three Lamps to Arena pedestrian unit - Temporary traffic management - Travel planning	"Given the nature of the proposals, the site will at times place concentrations of people and car trips on certain section of city. Measures are in place to management these trips and to ensure access is possible for all journeys." (EIA paragraph 7.7.1)	The Arena is considered to fully meet policy requirements in terms of accessibility, sustainability and high quality design and the mitigation and management of residual traffic impacts. As such, the proposals are considered acceptable in terms of ES assessment criteria."

	Summary of baseline conditions	Summary of potential environmental effects	Summary of mitigation measures	Summary of Residual Impacts (impacts remaining after mitigation)	Key Conclusions
		impact on the highway network. For the purposes of the EIA, a 6,000 matinee event has been tested and it is concluded that it will have a "limited traffic impact" (EIA, para. 7.5.3.9)			
Air Quality	BCC have declared an area covering the city centre and parts of the main radial roads including the M32 as an Air Quality Management Area (AQMA). This is as a result of failing to meet the hourly and annual mean for Nitrogen dioxide (NO2) and the 24-hour mean for Particulate matter (PM10) (EIA para 8.4.1.1)	The following activities during construction have the potential to impact on local air quality: - Earthworks - Construction - Trackout Potential for nuisance from dust and impact from elevated PM10 concentrations (Magnitude – Large) Once constructed, it is predicted that short term NO2 concentrations are expected to be within the relevant air quality objective as all annual mean NO2 concentrations are below 60 μg/m3. For PM10, while dispersion models are recognised as "less accurate" (EIA,	Construction and demolition: - Monitoring: Agree dust disposition, dust flux, or real-time PM10 continuous monitoring locations with the local authority (EIA, para.8.6.11) - Site Management (including the display of contact details of person accountable for air quality) - Dust management plan.	Insignificant	It is concluded that during construction and demolition, site activities have the potential to affect to local air quality in particular from dust deposition and an increase in particulate matter concentrations. Mitigation measures are recommended for implementation to ensure that any impact local air quality is insignificant. With regard to operational impacts, as the majority of visitors travelling to

	Summary of baseline conditions	Summary of potential environmental effects	Summary of mitigation measures	Summary of Residual Impacts (impacts remaining after mitigation)	Key Conclusions
		para. 8.5.2.7), the maximum number of days exceeding the objective concentration is four. This is well within the allowable "35 exceedances" which are permitted in the objective. The use of a temporary energy centre will give rise to emissions, however due to the locations away from any sensitive receptors, it is unlikely to have significant impact on air quality (EIA, para. 8.9.6).			the site by car will be dispersed throughout the city, the change in pollutant concentrations is considered negligible at all identified receptors and therefore it can be assumed that the impact from traffic emissions on local air quality as a result of the development will be negligible.
Historic Environment (Archaeology and Heritage)	There are no listed buildings on the site but Temple Meads (Grade I), Temple Gate and Three Lamps sign Post (both Grade II*) are nearby. The only standing heritage asset on the site is the	Assessed to be minor on Grade I and II* designated heritage assets and non-designated assets.	Photographic recording of the site would be appropriate.	Groundworks associated with Phase 2 development has the potential to physically affect any buried archaeological remains that may be present. However this is assessed not "significantly high" (EIA, para.9.7.1).	The impact on the only standing heritage site (Bath Road wall) is unknown at this stage. There will be an impact on the setting of the Temple Meads station but the conclusion reached is that the "effect on the most

	Summary of baseline conditions	Summary of potential environmental effects	Summary of mitigation measures	Summary of Residual Impacts (impacts remaining after mitigation)	Key Conclusions
	retaining wall adjoining Bath Road. Archaeology: EIA para.9.4.38 states that the potential for the presence of buried remains of prehistoric, Romano-British, Anglo-Saxon, medieval and early post-medieval date has been assessed as low.				significant elements of the setting from the purely heritage aspect (the approach from temple gate and its immediate environs, the interior of the later 19th – century curving train shed, and the view of the train shed from Bath Road) will overall be only slight to moderate." (EIA, para.9.8.3). It is concluded that the development site has low potential for buried archaeological remains over the southern part of the main area east of Bath Road. There is limited potential for fragmentary remains.

	Summary of baseline conditions	Summary of potential environmental effects	Summary of mitigation measures	Summary of Residual Impacts (impacts remaining after mitigation)	Key Conclusions
Townscape and visual Assessment	A detailed description of the existing site is provided. The EIA has been structured around a Townscape Character Area which comprises an area of 2.5km from the centre of the site.		Incorporated into the development proposals.	Following the completion of the arena (Phase 1) it is anticipated that the outline application for the mixed use development will be progressed. It is anticipated that it will consist of 5 separate buildings of no more than 27m tall. As it is anticipated that this development will be complementary to the arena, it is considered that it will not lead to a detrimental cumulative effect to the TCA or the detailed study area.	EIA para 10.8.2 states that there are "no significant adverse effects noted for the TCAs during either construction or completion. This suggests that the site could be considered to be an appropriate setting for this scale and character of development."
Sustainability	There are a number of headings contained within the Sustainability: Energy: Site is currently vacant and therefore energy consumption is negligible. Drainage: No	Energy: "The construction and operation of Bristol Arena and mixed use development will consume energy and (indirectly) emit carbon emissions which can affect global climate patterns. This is an extreme, adverse, long-term, indirect, permanent, and cumulative impact."	Energy and climate change: The design will "minimise energy consumption from the outset through the use of low energy, passive measures and efficient systems before the deployment of low and zero-carbon technologies."	Acknowledgement that residual effects remain include: -Consumption of finite resources -Carbon emissions causing climate change -Production of waste which will impact on land-use provision and generate	Beneficial impact on drainage, urban realm, community and economy but potential adverse transport, nature conservation, energy and climate change, waste, water resources and material resources.

	Summary of baseline conditions	Summary of potential environmental effects	Summary of mitigation measures	Summary of Residual Impacts (impacts remaining after mitigation)	Key Conclusions
	formal drainage currently remains on site. Transport: Temple Meads is currently a 6 minutes' walk from the site, where the nearest bus stops are located. Roads at and near the site are currently damaged and nearby public car parking is on-street parking, but there are four residents' parking schemes in operation. Waste generation: The site is currently vacant and so this is negligible. Community access: No	(EIA, para. 11.5.2) Drainage: The development: "… may have a potentially major adverse long-term, permanent, direct impact on surface water run-off." (EIA, para. 11.5.3) Transport: " It is considered the construction and operation of Bristol Arena and mixed use development will have a moderate beneficial, long-term, direct, permanent impact on pedestrian/ cyclist environment including surfacing, lighting, signage, access and connectivity." (EIA, para. 11.5.4) In respect of parking, the EIA considers that the operation of the arena will have a moderate, adverse, long-term, direct,	(EIA, para. 11.6.2) Drainage and surface water run-off: Mitigation includes employment of green infrastructure features, high capacity slot drains, soft landscaping and permeable pavement filters. Transport: Mitigation includes residents' parking schemes and extended park and ride operation. Waste generation: development of a waste management plan. Nature conservation: Measures include	methane which contributes to climate change.	Relevant mitigation is referred to elsewhere in the application documentation.

	Summary of baseline conditions	Summary of potential environmental effects	Summary of mitigation measures	Summary of Residual Impacts (impacts remaining after mitigation)	Key Conclusions
	public access at this time. Nature conservation: The site is currently a former industrial site that is subject to contamination. Ecological surveys have not identified any significant plants species within the site. Economic: The site is currently vacant and so economic contribution is negligible. Water: The site is currently vacant and so water use is negligible. Material resources: The site is currently vacant and so	permanent impact on parking convenience for residents in the local area. (EIA, para. 11.5.5). Waste generation: "The construction and operation of Bristol Arena and mixed use development will have potentially moderate adverse, long-term, indirect, permanent impacts." (EIA, para. 11.5.7). Urban realm and placemaking: " The Arena will create a landmark destination for events and the mixed use development will provide a place that facilitates continual activity. Bristol Arena will improve the connectivity, views, pedestrian environment, safety, and lighting of the site." (EIA, para. 11.5.8) Community: "The construction and operation of	providing integrated public space and exploring the use of existing features such as the Bath Road retaining wall. Water resources and climate change: Strategy to minimise water demand as a priority. Material resources: Strategy to minimise material resources as a priority.		

	Summary of baseline conditions	Summary of potential environmental effects	Summary of mitigation measures	Summary of Residual Impacts (impacts remaining after mitigation)	Key Conclusions
	material resources is negligible	Bristol Arena and mixed use development will have a major, beneficial, long-term, direct, permanent impact on the local community." (EIA, para. 11.5.10) Nature conservation: " The construction and occupation of Bristol Arena and mixed use development will have potential minor adverse, short term (disruption during construction) and long term (during occupation), direct temporary (disruption during construction) and permanent (displacement/direct habitat loss due to construction) impacts on local ecology." (EIA, para. 11.5.11) Economic: will create long-term employment opportunities, create new homes including affordable housing, residents			

	Summary of baseline conditions	Summary of potential environmental effects	Summary of mitigation measures	Summary of Residual Impacts (impacts remaining after mitigation)	Key Conclusions
		and workers will spend money in the local economy, stimulate growth within Bristol TQEZ, one of the largest regeneration programmes in the UK." (EIA, para. 11.5.13) Water resources and climate change: "the construction and operation and construction of the arena and mixed use development will have "potentially adverse, long-term, direct and indirect temporary (construction phase) and permanent (during operation) impacts on water resources and will affect local and global climate through energy use and carbon emissions associated with the treatment and pumping of water (EIA, para. 11.5.14). Material resources: " The selection of materials in the construction of			

	Summary of baseline conditions	Summary of potential environmental effects	Summary of mitigation measures	Summary of Residual Impacts (impacts remaining after mitigation)	Key Conclusions
		Bristol Arena and mixed use development will have potentially major adverse, direct and indirect, long-term, permanent impacts. Construction materials have far reaching environmental, economic and social impacts." (EIA, para. 11.5.15).			
Ecology	There are no statutory designated nature conservation sites within 1km of the application site. There are two SNCI within 1km of the centre of the site: -The River Avon SNCI and the railway lines are identified as Wildlife corridors in the Development	Construction: Potential for direct habitat loss, mortality of protected species, disturbance and contamination. Future development: Phase 2 development will replace some of the car parking associated with Phase 1: "No significant ecological impacts are predicted for this development." (EIA, para.12.5.25) An assessment of the impact of habitat loss,	Best practice construction measures will be followed. An ecological clerk of works is to be appointed. Non-statutory designated sites and Habitats: Landscape Masterplan shows extensive tree and other planting around the margins of the site.	Overall not significant.	EIA para. 12.8.1: "Through the implementation of well-established approaches to mitigation, which will be implemented in accordance with best practice guidance." As a result, no residual significant adverse effects are predicted for the ecological receptors in the long-term following implementatio

	Summary of baseline conditions	Summary of potential environmental effects	Summary of mitigation measures	Summary of Residual Impacts (impacts remaining after mitigation)	Key Conclusions
	Plan.	mortality of protected species, disturbance and contamination on the following during construction is assessed and included in the EIA: -Non-Statutory Designated sites and habitats: The removal of habitat, disturbance and contamination are all considered to be significant. -Bats: Impact predicted to be significant. -Breeding birds: Impact predicted to be significant. -Invertebrates	Bats: European Protected Species (EPS) Licence required for removal of a single common pipistrelle roost. The Licence will relate to the provision of compensatory roosting provision. Breeding birds: A series of bespoke nesting opportunities will be provided for a range of birds.		n of mitigation measures.
Ground conditions (Soil, Geology and Contaminated land)	General geological sequence is up to 10m of made ground, approximately 1m of alluvium underlain by interbedded siltstone and sandstone (however there are significant differences over the	During construction: Construction workers (High Sensitivity). Effect: Contact with contaminated materials during earthworks (Moderate magnitude) Neighbours	During construction the Construction Code of Practice (CCoP) is to be following. In respect of operational mitigation measures reference is made to further	Negligible residual effects during construction and operation.	"Considering the development and surrounding land uses, no cumulative effects are anticipated relating to ground conditions." (EIA, para.13.8.1)

	Summary of baseline conditions	Summary of potential environmental effects	Summary of mitigation measures	Summary of Residual Impacts (impacts remaining after mitigation)	Key Conclusions
	application site). The Remedial work already undertaken "has reduced contamination loading in both soils and groundwater" (EIA, para.13.4.2.3)	(Moderate). Effect: Inhalation of contaminated dusts and/or gases/vapours (Moderate magnitude) Groundwater (Perched in Made Ground and tidally influenced, Upper bedrock (mudstone/siltstone) and lower bedrock (siltstone/sandstone) (Moderate). Effect: Migration of contamination into groundwater via new pathways e.g. during piling (Moderate/Negative). Surface Water (River Avon – tidally influenced) (Moderate). Effect: Migration of contamination via groundwaters and drainage. Surface water run-off (Moderate/Negative). Built Environment	remediation/ investigation of the success of the existing remediation to mitigate residual land quality risks including ensuring suitable materials are used protection or betterment of controlled waters and protection of human health (EIA, para.13.6.4).		

	Summary of baseline conditions	Summary of potential environmental effects	Summary of mitigation measures	Summary of Residual Impacts (impacts remaining after mitigation)	Key Conclusions
		(Moderate). Effect: Attack on concrete or buried services by existing contamination (Moderate/Negative).			
Water Resources and Flood Risk	The current site therefore has no formal surface water drainage system in place but an agreed surface water outfall has been provided for connection of the proposed redevelopment (EIA, para.14.4.8).	Construction phase: River Avon (High Sensitivity). Effects: Including increased sediment loads and accidental release of hazardous materials (Major adverse) Site users (High Sensitivity). Effect: Flood risks to site workers (groundwater, surface water and fluvial / tidal from the River Avon) (Moderate adverse) Operational phase: River Avon water quality (High Sensitivity). Effect: pollutants contained in surface water (Major adverse). Flood risk:	Construction Phase: CEMP Operation: implementation of a drainage strategy.	"If the mitigation measures are implemented, along with good site practice, the residual construction impacts to the water environment are not considered to be significant and temporary for the duration of the construction period." (EIA, para.14.7.1)	Key conclusion: "With the implementation of the National Planning Policy Framework and the requirements of Wessex Water, Bristol City Council and the Environment Agency, using the methods outlined within the Drainage Strategy, it is envisaged that there will be no significant adverse effects during operation of this new development when compared to the current baseline to

	Summary of baseline conditions	Summary of potential environmental effects	Summary of mitigation measures	Summary of Residual Impacts (impacts remaining after mitigation)	Key Conclusions
		Negligible. Water services infrastructure (supply) (High Sensitivity). Effect: Increased water demand (Moderate adverse).			either flood risk or water quality in the River Avon." (EIA, para.14.8.3)
Noise and Vibration	Background noise levels are in general dominated by noise from road traffic and train movements (EIA, para. 15.4.1).	Construction phase: "On the basis of the figures presented in Table 15.16 (above) regarding the distances at which vibration from various construction activities will occur, the vibration is unlikely to be perceptible at the nearest existing vibration sensitive receptor and so will have 'no significant' effect ." (EIA, para.15.5.6) Operation phase: No significant effect from noise from the arena building. Variable patron noise (external to the arena). Arena Service Yard Noise: No significant effect.	Construction phase: "The predicted construction noise is expected to have no significant effect at all." (EIA, para.15.6.1) Operation phase: Mitigation to include: -High mass profile roof construction for the main arena bowl. -Pre-cast concrete panels for vertical façade elements for the main arena bowl.	There are no significant residual effects either during construction or operation.	"The assessment has concluded it is likely there will be no significant effects from construction noise at any other noise sensitive receptor. It is likely there will be no significant effects from construction vibration at any sensitive receptor." (EIA, para.15.8.6) "Mitigation measures will be included in the ongoing detailed design development for the Arena envelope so that music noise break-

	Summary of baseline conditions	Summary of potential environmental effects	Summary of mitigation measures	Summary of Residual Impacts (impacts remaining after mitigation)	Key Conclusions
			-Roof movement joint detail shall be designed so the sound reduction performance of the roof and façade elements is not compromised. -Internal space planning will be used where possible to provide acoustic buffer spaces around the main arena bowl envelope. -Access doors to the main arena bowl will be specified with appropriate sound reduction rating.		out has no significant effect in accordance with relevant guidance documents and experience based on previous UK music arenas." (EIA, para.15.8.7)
Lighting	The existing vacant nature of the site means that the baseline and existing light levels are low on	Introduction of light onto the site, which will have a moderate environment effect, but the impact on Temple meads complex has been	Design to include measures to ensure that the riverbank is specifically kept to below <0.5lx (EIA,		"In overall terms, the general lighting of the site, lampposts,

	Summary of baseline conditions	Summary of potential environmental effects	Summary of mitigation measures	Summary of Residual Impacts (impacts remaining after mitigation)	Key Conclusions
	site and riverbank (EIA, 16.5.3.1-16.5.3.4)	assessed as low due to the distance from the application site and blocking buildings (EIA, para.20.12.5)	para.16.9.12).		bollards and buildings will have low/moderate impacts in the city centre context." (EIA, para.20.12.9)
Socio-Economic effects	Baseline information on the current health of the Temple Quarter Enterprise Zone, Bristol and the wider South West is provided.	"The socio-economic effects of the development are considered to be beneficial. The development will provide a facility that is an arts, entertainment and social facility for the city and region." (EIA, para.20.13.1) One indicator of the effect of the development recorded in the EIA is the creation of jobs: "In terms of economic impacts… direct jobs created would be in the order of 444 and indirect jobs and catalytic effect of over 5,300 with the majority			"The social benefits of the facility is major and the impact of the mixed use development is minor or negligible in terms of the impact on population and services. Additionally the scheme provides a direct benefit of delivering a new city centre open space within the scheme for public use and community use." (EIA, para.20.13.6)

	Summary of baseline conditions	Summary of potential environmental effects	Summary of mitigation measures	Summary of Residual Impacts (impacts remaining after mitigation)	Key Conclusions
		potential benefits for the city centre and south Bristol given the location. " (EIA, para. 20.13.3)			
Waste	Information provided as baseline conditions (EIA, Section 18.4) refers to the policy contained within the Joint Waste Core Strategy for the four unitary authorities to 2026.	Construction phase: "The site is expecting 12,570 tonnes of construction waste will be generated, giving a maximum per year waste construction generation of 5,010. This represents a 0.2% increase in the Bristol area (2,301,000 tpa) estimated C&D waste generation rates for 2015 (less than the 5% negligible threshold)." (EIA, para. 18.6.1) Operation phase: " As indicated previously an estimated maximum of 1,137 tonnes of operational waste will be generated by the Arena Island development per year. When	Limiting waste at source through design, e.g. by aiming to reuse as much demolition and excavation waste as possible (EIA, para.18.7.3) A Site Waste Management Plan (SWMP) has been drafted (EIA, Appendix 18-C)	Recognition at 18.8.3 that the Phase 2 development, waste mitigation will be revisited (EIA, para. 18.8.3)	The importance of Site Waste Management Plan is acknowledged at EIA, para.18.8.4: "The SWMP is for the entire masterplan development and presents details on total construction waste generation and a number of methods of reducing this waste, and cost saving initiatives."

	Summary of baseline conditions	Summary of potential environmental effects	Summary of mitigation measures	Summary of Residual Impacts (impacts remaining after mitigation)	Key Conclusions
		compared to the Bristol annual average waste generation rate of 1,440,000 tonnes of combined MSW and C&I waste the development's waste generation rates represent an increase of 0.08%, which is less than 5% threshold for negligible impact." (EIA, para.18.6.3)			
Construction Management	"The existing site is derelict and unused, although previous activities normally associated with construction have already taken place." (EIA, para.19.4.1)	"The construction impacts from development has potential impacts particularly in terms of air quality, noise, amenity and contamination. However, mitigation measures to reduce dust, noise, lighting and traffic management will reduce impacts to no significant effect." (EIA, para.20.15.3)	All mitigation will be delivered through a Construction environmental Management Plan (CEMP) (EIA, para.19.6.1)	None	Impacts of construction will be adverse by their nature, but temporary (EIA, para.19.8.5)

APPENDIX – CITY DESIGN COMMENTS

City Design Group welcomes the proposal. It fulfils a longstanding ambition to develop an important cultural venue for the City. The location and broad design of the proposal is as per the TQEZ Framework and policy guidance. The design team has progressed the project well within the given time constraints. There are however a few areas where there is scope for further design refinements and improvements; considering the scale and complexity of the project this is not unexpected. It is considered the refinements can be addressed via appropriately structured planning conditions and therefore it in recommended to approve the application with following planning conditions highlighted in *Italics* in the text below.

The context

The Arena Island site is located in a highly sustainable location adjacent to Bristol Temple Meads (BTM) railway station and in the heart of the Temple Quarter Enterprise Zone (TQEZ). The site is within easy walking distance of the sustainable transport hub around BTM and proposed Metrobus stops.

The site and area around it currently appears as an industrial back land. However, it presents a significant growth and development opportunity for the City. The framework for TQEZ and associated infrastructure investment are planned to transform this area and open it up as an important opportunity for growth and development of the City. The Arena project is one of the early developments in this wider strategy; it will facilitate a radical shift in perception of the area and encourage further investment.

Archaeology

The site has been cleared and decontaminated. It has very low archaeological potential. The only remaining heritage features (retaining wall) should be retained as positively expressed in the design and use of the site.

Strategic movement framework

In order to serve its role within the wider townscape, attain the sustainable movement framework for the area and encourage use of the Arena Island as a key community facility, it is essential for the Arena Island to be connected into a wider movement framework as being proposed by the emerging TQEZ framework.

A robust signage strategy as part of the legible city programme is needed facilitate sustainable journeys to the facility from the city centre, transport hubs and similar key locations.

The HCA Bridge and improvements to the Cattlemarket Road currently under construction, the proposed bridge to St Philips currently subjected to a separate Planning Application (16/00222/F) and first phase of pedestrian/cycle improvements along the Bath Road proposed as part of the current applications are the key infrastructure gains from the Arena project. It is important to realise a well-managed, convenient and accessible route across the Arena Island linking Bath Road to Cattlemarket Road.

There are management and maintenance concerns with the proposed arrangement for a freestanding public lift connecting the podium and the plaza levels. It is felt that it will be better to locate the lift as part of the arena building.

It is further recommended that consideration is given to the proposed arrangement and explore options for an access ramp connecting the two levels.

Furthermore, the route in the Phase-2 framework comes to an abrupt end at the informal seating area and performance space of the Phase-1 application. While it is accepted that each phase will make some improvements, it is important that each phase to retain a reasonable provision for the link. It is important to further explore the arrangement and present a cohesive interface between the movement framework of the two phases.

Landscape on the Island

The proposed landscape of the Island comprises of a number of features and facilities that will significantly influence how visitors to the Arena will appreciate and use the space, by complimenting the building architecture and providing it with a dynamic setting and accommodating a variety of uses providing year around activity and vibrancy to the Island. The landscape also needs to be responsive to the requirements of the context and movement framework set out above. Further it is also important to ensure the management and maintenance of the landscape fully considered.

Riverfront edge

Proposals to strengthen the existing trees on the river frontage are supported; a well-established tree structure will define the site boundary, mitigate the intensification of built form and traffic movement. It will also reinforce the variety of riverside habitat, increasing the capacity for wildlife activity. The riverfront also provides interest to site users, bringing with it the potential to develop sitting areas, footways and ancillary requirements, such as general access, food, refreshment and toilets.

The current proposal for cycle parking on a site adjacent to the retained stone wall, which is the only remaining reference to the sites history, and overlooking the river is not considered to be the best use of such an asset. It is suggested that the applicant reconsider the design of the area to rationalise car and cycle parking and creating riverfront uses such as café/restaurant with outdoor seating and other suitable river front uses.

The location between the accessible parking area and the plaza is considered to be a suitable location to provide cycle parking provision for the facility. This may also serve to frame the plaza using a well-designed structure showcasing the sustainability driven spirit of the city.

Plaza and External Arrangement

The creation of smaller outdoor events spaces adjacent to the plaza provides the opportunity for use of this important hard space irrespective of the Arena programme, thereby independently tying it into a broader city wide events programme and facilities.

Terraced seating proposals are broadly supported, though the treatment and finishes of the steeped landform and lawns will need to be resistant to intense use. Timber decking needs to be slip resistant and durable. If executed to the standard illustrated in the DAS it will form an important element to enhance the appearance of the site, but further deliberation is needed with regard to this aspect of the proposal.

Given the intensity of use which the plaza is likely to experience, the necessity for a water feature is questionable and will inevitably involve high maintenance costs in the long term; it is suggested that financial resources would be better spent improving proposals for materials and finishes – see comments below.

It is recommends considering a robust structural landscaping and use of quality finishes for framing and notionally subdividing the plaza and adding finer grain interest without the need of movable heavy landscape features. If pursued, any temporary raised planters should reflect the attention to detail appropriate to a high quality external space and consideration given to their storage, and ease of transport to the site.

The retaining wall between the terraced seating and the temporary car park creates a rigid separation and impinges on the adjacent row of trees. It is recommended to reconsider the design of this area not least to provide a ramped access across the site.

Tree planting

The proposed planting strategy is acceptable in principle, though the details shown in the design and access statement give rise to concerns in relation to long term viability, particularly in relation to the trees on the entry boulevard.

These trees - London planes - are intended to provide significant stature in response to the mass of the Arena building, but the section drawing indicates tree pit dimensions that will not support the canopy size illustrated.

The use of trees in planters to define the boundary to the temporary parking area (Phase 2 site) is unlikely to provide a strong structural component and will require continual watering during summer months - an irrigation system for tree planting on the site is recommended. Placing trees in locations where they can be established long term is preferred.

Details and finishes

While the inspiration for the paving strategy - 'the industrial charm of the site' - is noted, the material selection indicated in the Design and Access Statement gives rise to concerns relating to the perception of the plaza as a high quality open space. This may be a consequence of the images selected, but the overall impression is of a budget restricted pallet. Consideration needs to be given to improving the quality and feel of the materials. It is recommended that savings from installation and management of the water fountains, movable planters and freestanding list should be channelled to this effect.

Buildings Height, scale and massing

The Arena will be a prominent building within the townscape and this is confirmed by the findings of the Environmental Statement Visual Impact Assessments. Its visual prominence is in keeping with its functional and civic role as a key asset and important facility for the city. There is an acceptance that the application in its broadest configuration will provide a much needed development as set out in the planning policies including BCAP and TQEZ framework on what is currently an important but underused site.

The siting, height, scale and massing of the Arena building and the general arrangement of the key aspects of the development parcels within the Island site are as per the TQEZ framework and accepted.

The impact of the proposed Phase-2 on its context and settings needs to be tested and understood. Consideration needs to be given to the key views, such as the setting of the listed BTM Station and the Arena building. It is therefore recommended to reserve the determination of building heights for Phase-2 via a planning condition to be discharged in advance of the first reserve matters application for the Phase-2.

Buildings details and samples

The general design and appearance of the Arena building is supported and presents the potential to deliver a high quality landmark building for the city. It will be critical to ensure the quality of the final scheme delivers the design expectations set out in the design and access statement. It is therefore recommended to apply planning conditions seeking approval of large scale details and sample panels of materials before implementation on site.

The material of the wall facing the railway tracks is not apparent from drawings. Given the location of the wall and its relation to the railway line, stone or brick are considered to be suitable material for its construction. Further the design of the boundary fencing and landscape treatment long the edge needs to be confirmed.

Public Art

The public art strategy submitted with the planning application needs an update to separately identify and emphasize the distinction between the public art component for the building and the wider Arena Island. It is therefore recommended to seek an updated public art strategy and series of detailed design for the artwork.

Recommendations and conditions

It is recommended to approve the detailed application for the Arena project and outline application for Phase-2 development subjected to conditions covering the following;

<u>Arena Building</u>

Drum

- *Notwithstanding the submitted drawings, details of – external cladding; gangways/fixings and its interface with external cladding/lighting; joints of the metal finish; coping; soffits*
- *Notwithstanding condition requiring sample panel of material*

Concrete Plinth

- *Details of –pattern/design arrangement; how it meets the ground; coping; lintels/soffits, reveals/jambs*
- *Condition requiring sample panel of material*

Wall facing the railway line

- *Confirm the materials and provide samples for wall finish.*
- *Provide design and details for the fencing along the railway line.*

Glass middle layer

- *Details of – panelling arrangement; top and bottom intersection; doors including the jambs lintels and thresholds.*
- *Condition requiring sample panel a material to be provided*

Roof – preferably to be resolved prior to determination

- *Bird control and management measures*
- *Details of fall protection, edges*
- *Sample of the final finish*
- *Solar Panel – confirm structural capacity to fix it; reflectivity from neighbouring areas; flight path; green areas.*

<u>Landscape</u>

- *Notwithstanding conditions covering the overall landscape design for the Arena Island taking on board the above comments.*
- *Detailed design of bike store, stepped seating etc.*
- *Hard and soft landscaping plan confirming surface finishes, tree pits, interaction with buildings, thresholds.*
- *Samples of hard surface fishes, any build up elements such as boundary walls to be approved on site*
- *Manufacturer specification for any street furniture, tree protection, lighting fixtures, fencing etc.*
- *Lighting plan for the site to be provided*
- *The signage strategy shall be in compliance with the legible city.*

Public Art

- *Revised public art strategy*
- *Details of individual public art projects within the wider public art strategy.*

Strategic City Transport

Transport Development Management

Application Response

To:	**Peter Westbury**, Major Schemes Planning Team
From:	**Laurence Fallon**, Transport Development Management
Ext:	x36846
Date:	February 2016
Address:	Former Diesel Depot Bath Road Brislington Bristol BS4 3DT
Application No:	15/06069/F & 15/06069/P
Applicant:	**Bristol City Council**

Proposal:

1. FULL APPLICATION: Construction of 12,000 capacity indoor arena on the south part of the site, creation of public plaza in front of arena and landscaping of the site; Permanent disabled parking (45 spaces) and cycle parking facilities (252 spaces), temporary surface level parking for operational staff and VIP's (200 spaces) for a period of 5 years;

2. OUTLINE APPLICATION: (All Matters Reserved) for up to 19,000sqm of mixed use development on Arena Island comprising retail (Use Classes A1, A2, A3, A4); offices (Use Class B1); leisure (Use Class D2); residential dwellings, including affordable housing (Use Class C3); hotel (Use Class C1) and student accommodation (Sui generis).

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1. PREAMBLE

- **The above proposals generate substantial transport issues that require to be comprehensively addressed in the interests of: the success of the development; its impact on the highway network; and the environmental quality of the wider area.**
- **The fundamental policy requirement is therefore to ensure that a package of sustainable transport infrastructure is implemented to support the development. In this context, many of the requirements contained in this report are not considered as mitigation, but are minimum access requirements that will enable the site to operate successfully and sustainably from the first event onwards.**
- **It should be noted that BCC cannot enter into a section 106 legal agreement with itself to secure infrastructure that is vital to the development. Therefore, a robust and implementable series of conditions is sought from this scheme in the interests of arena users and others affected by the development.**
- **It is however recognised that some of the requirements will rely on separate processes, agreements and consultation with third parties and therefore cannot be subject to specific planning conditions. The Transport Development Management (TDM) team has been actively working with the Arena Project Team on these issues.**

1.1 TDM seeks significant comfort that suitable and robust mechanisms are put in place in order to deliver the appropriate infrastructure and at the right time to serve the arena development in policy compliant a way that:

a. **minimises the negative impacts of additional traffic generation in Bristol;**
b. **offers viable and realistic alternatives to car use that are of high quality and that compliment events taking place at the arena site;**
c. **ensures safe and suitable access for all users wishing to access the site;**
d. **delivers high quality permeability to and through the island site in a way that does not compromise the future movement objectives of the wider Temple Quarter Enterprise Zone;**
e. **successfully discourages private car travel to the site through an effective package of deterrents to car use alongside the marketing and promotion of incentives for sustainable travel;**
f. **provides high quality information to those travelling by car relating to the availability of parking inside and outside of the city;**
g. **Effectively manages the movement of visitors / spectators / deliveries and performers to and from the arena in such a way as not to compromise their safety and that of highway users unconnected to the arena.**
h. **Ensures the adoption of safe and practical measures during the construction of the development that avoid detriment to the surrounding highway network or nearby businesses / residents.**

1.2 In Transport terms, the degree to which the Arena development and therefore the City Council effectively addresses the above requirements is pivotal to the long-term impacts and therefore the success of the facility in serving not just the residents of Bristol but the wider South-West region. This is not just in the interests of the commercial success of the Arena in attracting activity and investment, but also the health and wellbeing of the residents of the City of Bristol and other users of its highway network.

1.3 TDM has therefore identified the following four key <u>physical</u> interventions which must be successfully delivered in order for the above goals to be achieved. These are examined in greater detail in this report.

a) **The operation of rail and bus-based park and ride services to coincide with the end of arena evening events, to reduce car trips and to intercept visitors travelling by car before they enter Bristol's highway network;**
b) **The implementation of restrictive parking controls in areas that would be negatively impacted by short-term mass demand for on-street parking;**
c) **The implementation of safe facilities for picking up and dropping off movements by taxis, coaches, disabled users and general traffic;**
d) **A safe and convenient environment for pedestrians and cyclists within and around the site which encourages rather than deters walking and cycling;**

1.4 TDM considers that subject to the delivery of the above interventions and at the correct time, the development proposal will be acceptable in transport terms.

2. TRANSPORT BACKGROUND

2.1 Temple Quarter Enterprise Zone (TQEZ) Infrastructure

2.1.1 Although detailed elsewhere within the submitted Transport Assessment (TA) and also within local planning and transport policy, it is worth noting briefly the transport context in which the Arena Island application comes forward for determination.

2.1.2 The TQEZ comprises over 70 hectares and aims to attract a total of 17,000 new jobs and a considerable number of new homes to the area over its 25 year lifespan. This area has been selected as an Enterprise Zone not just in terms of the need to regenerate a former industrial area and create a new mixed-use district, but also in view of its potential to benefit from new and existing sustainable transport linkages.

2.1.3 However, BCC and its surrounding West of England authorities are in no doubt that the current options for sustainable travel in this area are not adequate to serve this level of growth and would lead to a significant worsening of highway and environmental conditions without substantial interventions.

2.1.4 It is therefore fundamental that in order to attract investment, multi-modal improvements are necessary to enable greater movement to the area by more sustainable means of transport in the interests of the health of the city. To this end, the following interventions are due to be implemented or are already underway:

Rail Improvements (2017-21)

a) The electrification of the Great Western Railway and subsequent provision of faster trains between London and Bristol, enabling a greater frequency and shortened journey times between existing settlements and urban centres.

b) The increase in frequency and therefore capacity of the local rail network through the doubling in the amount of track to the north of Temple Meads in the interests of providing greater resilience and opportunity for local rail services.

c) In conjunction with the above, the delivery of new rail connections to Portishead and Pill (in 2019/20) as part of MetroWest Line 1 and at Henbury, Filton and at Ashley Down as part of MetroWest Line 2. Further additional suburban rail stations will be subject to the appropriate business case and funding packages.

Bus Improvements (2016-17)

d) A £200m package of investment in the West of England's bus network is currently being delivered through the implementation of the MetroBus scheme, including the following routes: North Fringe – Hengrove (NFH); Ashton Vale – Temple Meads (AVTM), and the South Bristol Link (SBL). Future bus services using these routes will pass within a convenient walking distance of the TQEZ.

e) Investment in newer, cleaner vehicle technologies which reduce the carbon output of buses using Bristol's highway network is already underway.

f) Improvement to local bus infrastructure around Temple Gate as part of the Revolving Infrastructure Fund (RIF) mechanism (see below).

TQEZ RIF projects – Temple Gate & Temple Greenways (2017)

g) BCC is investing £21m through the Revolving Infrastructure Fund to deliver specific improvements to enable improved access to the TQEZ through:

h) Network Management and public realm improvements to the Temple Gate area to reduce delays to public transport and provide an improved environment for pedestrians, cyclists and public transport users, extending the existing *Brunel Mile* to Temple Meads and reducing pedestrian and vehicle conflict.

i) The implementation of new and improved walking / cycle connectivity: along Cattle Market Road; alongside the floating harbour via a pontoon walkway; along Feeder Road; alongside the River Avon and via new pedestrian / cycle footbridge between the Arena Island and Albert Road in St Philip's.

Access to Arena Island (2016)

j) The main vehicular and pedestrian access bridge to the Arena site is currently being delivered following a previous planning application submitted by the Homes & Communities Agency (HCA) to enable development on the former diesel depot site upon which the Arena is proposed to be built.

Temple Meads redevelopment (TBC)

k) The timetable the redevelopment of Temple Meads is not confirmed, although the improvements to the station are expected to be significant and will further enhance the accessibility of the TQEZ area through improved passenger facilities, better connectivity to the surrounding area and the reorganisation of how rail passengers will connect with the station by foot, bicycle and public transport.

2.2 Arena-specific interventions

2.2.1 The above package of measures will significantly improve the transport offer in this area and across central Bristol and is positive in the context of assessing the Arena planning application against forthcoming infrastructure delivery.

2.2.2 However, the following must be noted:

- **The above interventions are programmed over a number of years as part of different processes and as such not all will be operational from the outset of the arena;**

- **The delivery of the above infrastructure, whilst comprehensive does not fulfil every requirement of the arena project and therefore does not absolve it from delivering quality connectivity, accessibility and mitigation.**

2.2.3 As a result, TDM has been clear that the arena project should address and therefore minimise the specific impacts it will generate on Bristol's highway network where constraints currently exist that are not addressed by the interventions highlighted above.

2.2.4 The required additional infrastructure required by TDM has been discussed with the applicant and is detailed in **section 4**. However, it was first necessary, as per transport guidance, to understand the highway impacts of the Arena so that a package of improvements can be justified and delivered to support it, having regard to the six planning conditions tests set out in national planning policy.

3.0 TRANSPORT ASSESSMENT FINDINGS

3.1 Transport Assessment (TA) inputs

3.1.1 A number of assumptions were agreed between the applicant and BCC Highway officers in advance of the Transport Assessment being undertaken. These assumptions form the inputs to the detailed traffic modelling assessment which forecasts the impacts of arena and non-arena uses on the local highway network. The outputs from the modelling are considered later. However, it is considered helpful at this stage to firstly summarise the agreed inputs. The following future year scenarios have been considered in the submitted TA:

a) **2021 Weekday evening** – 6,000 and 12,000 capacity events

b) **2021 Saturday afternoon** – 6,000 capacity events

c) **2021 Saturday evening** – 6,000 and 12,000 capacity events

Use of reference sites

3.1.2 As with most forecasting procedures, the relevance of historical and comparative data from similar operations elsewhere is critical to the degree of confidence that can be placed upon the outputs of the transport modelling exercise. In this respect, it is of some comfort that there are numerous arenas of a comparable size already operating in other UK cities from which data can be sifted to ensure the most robust assessment is being made.

3.1.3 A number of the assumptions within the TA are taken from the *Stage One Feasibility Report* undertaken by Davies Langdon on behalf of BCC in 2012. This document sought to determine the viability of the arena in terms of the product being offered, the likely geographical catchment area and the extent of competition from other events / locations.

3.1.4 The above analysis has informed sections of the TA, which considers the surveyed travel behaviour patterns of visitors to existing arenas including Manchester, Nottingham and Leeds, each of which are based on the edge of a city centre with reasonable access to public transport.

Mode of Travel – Worst-case

3.1.5 Current guidance on Transport Assessment requires that the worst-case transport scenario of a major development is subject to assessment in the interests of avoiding a situation where the impacts of the development are underestimated.

3.1.6 In accordance with this, and in consideration of the above arenas the availability and coverage of the present rail and tram networks in those cities has been taken into account, along with the scarcity of late-night rail connections from Temple Meads. Accordingly, for the worst-case assessment the likely modal share for rail travel has been revised downwards to provide a realistic forecast in line with guidance. Further to this, the taxi mode share is reduced given that many of the taxi-passengers at other arenas use this mode to access rail connections. In addition to the above, the likelihood of a greater number of walking and cycling trips that an Arena at Bristol would attract has been increased to reflect the reliance on cycling trips in the city.

3.1.7 The following table provides an average of the mode share for the above three arenas (in column 2) with the worst-case assumption for the Bristol Arena (column 3) and the percentages applicable to a Saturday afternoon event (column 4), the latter taking into account the greater availability of public transport during this period of the week.

Table 3.1 Modal share assumptions - worst-case

	WEEKDAY & SATURDAY EVENING		SATURDAY AFTERNOON
Mode of Travel	**Other Arenas**	**TA Assumption**	**TA Assumption**
Car Occupant	75%	**80%** (+5%)	**65%**
Park and Ride	0%	**0%**	**5%**
Bus	5%	**5%**	**10%**
Coach	2%	**2%**	**2%**
Rail	9%	**4%** (-5%)	**11%**
Taxi	6%	**2%** (-4%)	**2%**
Walk and Cycle	3%	**7%** (+4%)	**5%**
TOTAL	**100%**	**100%**	**100%**

3.1.8 Highway officers are satisfied that the above evening mode shares would only be replicated in the event that night-time Park and Ride services, late-night rail connections, the MetroBus and MetroWest projects, rail electrification and the RIF package of measures referred to earlier are not implemented. Given that a number of these interventions are either already under construction or due to be confirmed, Highway officers concur that this forecast represents a very robust scenario and therefore comprising a reasonable assessment of the worst-case impact of the arena on the basis of the current transport network in the year of the planning application in line with guidance.

Vehicle Occupancy, Linked trips and Drop offs

3.1.9 Due to the communal nature of arena events, a further assumption is necessary concerning the number of arena visitors per car. Taking into account travel survey data from other arenas indicates an average 'persons per car' (PPC) of 2.4 for an evening event increasing to 2.7 PPC for a Saturday afternoon event, reflecting the attractiveness of such events to families.

3.1.10 A further assumption is made concerning those trips which may already be using the highway network prior to or after arena events. This is a reasonable assumption, given the timing of evening events when visitors may attend the arena straight from work, or where an arena visit has been combined with a shopping trip. In both the evening and Saturday afternoon scenarios, a reduction of 10% is made to the overall car trip generation. In addition to the above, a further 2% of trips are assumed to be drop-off movements. This is considered to be reasonable.

3.1.11 Following the above assumptions, the figures in **Table 3.2** below provide a summary of the number of arena visitors by mode for each of the five scenarios that are tested within the TA. The demand for car parking, coach drop-offs and taxi usage is also forecasted in the TA and summarised below.

Table 3.2 Worst Case Assessment – Forecast Mode Share, Trip Generation and resultant Car Parking, Drop-off and Public Transport demand

Evening Events			Weekend Afternoon events	
Capacity of Event	**12,000**	**6,000**		**6,000**
Visitors arriving by car (80%)	**9,600**	**4,800**	**Visitors arriving by car (65%)**	**3,900**
Persons per vehicle	2.4	2.4	Persons per vehicle	2.7
Total Car Trips	4,000	2,000	Total Car Trips	1,444
Less 10% linked trips	-400	-200	Less 10% linked trips	-144
Total car drop-offs (-2%)	-80	-40	2% drop-offs (-2%)	29
Total vehicles seeking parking	**3,520**	**1,760**	**Total vehicles seeking parking**	**1,271**
Park and Ride Users (0%)	**0**	**0**	**Park and Ride Users (5%)**	**300**
Bus Users (5%)	**600**	**300**	**Bus Users (10%)**	**600**
Coach Passengers (2%)	**240**	**120**	**Coach Passengers (2%)**	**120**
Coaches (based on 50 occupancy)	5	2	Coaches (based on 50 occupancy)	2
Rail Passengers (4%)	**480**	**240**	**Rail Passengers (11%)**	**660**
Taxi Passengers (2%)	**240**	**120**	**Taxi Passengers (2%)**	**120**
Taxis (based on above occupancy)	100	50	Taxis (based on above occupancy	44
Pedestrians and Cyclists (7%)	**840**	**420**	**Pedestrians and Cyclists (5%)**	**300**
TOTAL	**12,000**	**6,000**	**TOTAL**	**6,000**

Arrival and Departure Profile

3.1.12 The forecasted arrival profile has been agreed by officers and makes assumptions based on event start times of 19:30 hours for evening events, and 11:00, 15:00 and 19:00 for Saturday daytime events. Accordingly, the trip arrival and departure profile has taken the pragmatic approach that visitor arrivals / departures at such venues vary from up to three hours before and up to two hours after an event, depending on the time of the day, and the opportunity to visit other facilities, eg. food, shopping, drinking establishments as part of the same trip. The agreed profile is confirmed below for visitors as well as the staff on-site which are forecasted by the arena operator to number up to 460 for a major event.

Table 3.3 Trip Arrival / Departure profiles

Day / Event Start Time		-3hr	-2hr	-1hr	Event start	Event finish	+1hr	+2hr
		Arrival				Departure		
Weekday Evening	**Visitors**	30%	30%	40%	**19:30**	**23:00**	100%	
Saturday Matinee			70%	30%	**11:00**	**13:30**	60%	40%
Saturday Matinee & Evening		40%	40%	20%	**15:00** **19:00** **19:30**	**17:30** **21:30** **23:00**	100%	
All Events	**Staff**	70%	20%	5%	5%		80%	20%

3.1.13 Following the above, the trip arrival and departure forecasts are confirmed below.

Table 3.4 Trip Arrival / Departure forecast – Worst case

Day / Event Start Time		-3hr	-2hr	-1hr	Event start	Event finish	+1hr	+2hr
		Arrivals				Departures		
Weekday Evening	**Visitors**	1,080	1,080	1,440	**19:30**	**23:00**	3,600	
Saturday Matinee			910	390	**11:00**	**13:30**	779	520
Saturday Matinee & Evening		520 520 1,440	520 520 1,440	260 260 720	**15:00** **19:00** **19:30**	**17:30** **21:30** **23:00**	1,300 1,300 3,600	
All Events	**Staff**	139	40	10	10		158	40

Trip Distribution, Route Choice and Assignment

3.1.14 The above forecasts were agreed with BCC officers to allow for arena trips to be assigned to the highway network using a gravity model, which takes account of the likely draw from locations within a 60 minute (75km) distance of the Bristol area. The work contained within the TA takes forward the assumptions provided in the *Arena Feasibility Report* concerning trip origins and therefore allows for a forecast to be made of arena visitors' chosen routes to attend the arena. In terms of the draw from the wider urban area, the applicant provides the following figures for <u>all modes</u> of travel:

Arena Visitors from within BCC area: 21%

Arena Visitors from South Glos, B&NES & N. Somerset: 21%

Total Arena Visitors from within former Avon Area: 42%

Total Arena Visitors external to former Avon Area: 58%

3.1.15 The above calculations reflect the regional significance of the arena with the assignment of traffic illustrated below in **Table 3.5.**

Table 3.5 Arena Traffic assignment – Weekday & Saturday evening period

Route Description		Typical Origins	%	BCC internal trips
1	**East –** A4/ A431	Brislington, Bath, Keynsham, Wiltshire	**11.2%**	0.8%
2	**A37** south	Whitchurch, rural B&NES, Mendip	**7.6%**	2.3%
3	**A38** south	Bedminster, Bishopsworth, North Somerset, Sedgemoor	**8.6%**	1.2%
4	**M49/A4/ A369/A370** West	Shirehampton, Portishead, Nailsea, Clevedon, Cardiff, Newport, Monmouthshire, Torfaen	**16.4%**	2.2%
5	**A38 / A4018** north	Westbury, Henbury, Thornbury, Torfaen	**6.6%**	4.8%
6	**M32** north	NE Bristol, Cardiff, Newport, Cheltenham, Cotswold, Forest of Dean, Gloucester, Stroud, Tewkesbury, Monmouthshire, Torfaen, South Glos, Swindon, Wiltshire	**44.3%**	1.6%
7	**A420** east	St George, Kingswood, South Gloucestershire, Wiltshire	**5.3%**	1.2%
	Total		**100%**	**14.1%**

Trip-end destinations (Parking locations)

3.1.16 The above forecasts have been inputted into the assessment models, although this requires each trip destination to be confirmed. A detailed analysis was therefore carried out to determine where arena visitors arriving by car would be likely to park, based upon a 20-minute walking distance from the site, the trip origin and the existing and future locations of available and restricted parking within walking distance to the arena. The last assumption is critical and recognises the need to prohibit arena visitor parking in locations that would cause negative impacts.

3.1.17 Following surveys undertaken in 2015, a total of around 6,300 parking locations were identified within 20-minutes' walk of the site, comprised of around 5,000 spaces in existing major car parks, 700 spaces in secondary car parks and a further 600 on-street spaces or within the St Philip's Marsh Area. The latter area was included on the realistic assumption that this area is highly likely to be subject to arena parking. It was however agreed that the assessment should exclude residential areas within the 20-minute walking distance including Totterdown, Knowle, The Dings and Arnos Vale given that TDM will require such areas to be subject to event-day parking restrictions and therefore not available to arena visitors. A further exclusion relates to the Galleries car park which is not open in the evening and therefore has not been considered for evening events.

3.1.18 As part of the above surveys it was necessary to record existing parking demand to estimate the likely capacity of existing car parks to accommodate additional demand generated by the arena for a 12,000 and 6,000 capacity evening event and three consecutive 6,000 capacity Saturday daytime events. The occupancy of such car parks was then compared against the arena arrival patterns detailed above. Further detail of this is provided within the TA. However, the findings of this analysis are summarised below, based upon the worst case scenario of an 80% car mode share for weekday events and 65% for Saturday daytime events for which a maximum capacity of 6,000 visitors is confirmed by the arena operator.

12,000-capacity Weekday evening events – worst-case

- Existing parking demand at major car parks reduces over the period between 16:30 and 19:30 from **70%** to **26%** occupancy;

- Additional demand generated by the Arena results in the greatest pressure resulting in an increase from **70%** to **83%** occupancy (between 17:00-17:30) and from **26%** to **84%** (from 19:00-19:30) as parking associated with existing employment, retail and leisure uses coincides with Arena visits.

12,000-capacity Saturday evening events

- Existing parking occupancy at major car parks reduces over the period between 16:30 and 19:30 from **64%** to **43%**

- However, existing parking demand on Saturdays tends to stretch further into the evening due to leisure demands. As a result, demand generated by the Arena increases pressure for parking, with the maximum demand increasing from **43** to **98%** of occupancy (between 19:00-19:30) across all car parks.

6,000-capacity Saturday daytime events

- This scenario was tested with three consecutive 6,000 capacity events occurring at 11:00, 15:00 and 19:00. This scenario results in demand of **over 90%** across all parking between 12:30 and 15:00, although it should be noted that the availability of on-street parking in St Philip's was not considered as part of this scenario which would reduce this pressure.

3.2 Transport Assessment (TA) modelling outputs

3.2.1 The above trip generation, assignment, origin and destination forecasts have been entered into two models as follows. Both models are calibrated to represent the operation of the highway network in an agreed future year of 2021.

a) **G-BATS SATURN model** – a strategic model which forecasts the regional draw of the arena facility and how those trips are assigned to the highway approaches to central Bristol. This model also recognises congestion and therefore forecasts the routing behaviour of traffic in response to delays. This model is confined to the morning and evening peak hours of 08:00-09:00 and 17:00-18:00.

b) **S-PARAMICS model** – a more sophisticated microsimulation tool which models in detail the operation of the highway network in central Bristol with specific outputs relating to the the extent of queueing, congestion and delay on the highway network. This model has been constructed to assess the periods of 15:00-20:00 for a weekday and 12:00-15:00 and 16:00-19:00 for a Saturday.

3.2.2 The analyses summarised in the previous section confirm the origin of trips to the arena taking account of the regional draw. The trip-end destinations (car parks) were then established following the parking surveys, with the modelling programs determining the route choice on the basis of highway capacity, congestion and route journey time.

3.2.3 The assignment of arena car trips taken from the Saturn model is shown below for a weekday evening 12,000-capacity event. This illustrates the proportionate geographical demand generated by the arena by direction, reflecting the reliance of arena visitors upon the strategic highway network, with the M32 accounting for almost half the trips to the arena, as referred to earlier. The demands upon the A370 and the A4 from both directions are noted.

Figure 3.1 GBATS-SATURN model output – 12,000-capacity event, 2021 Arena traffic route choice - weekday evening 1700-1800 - Strategic

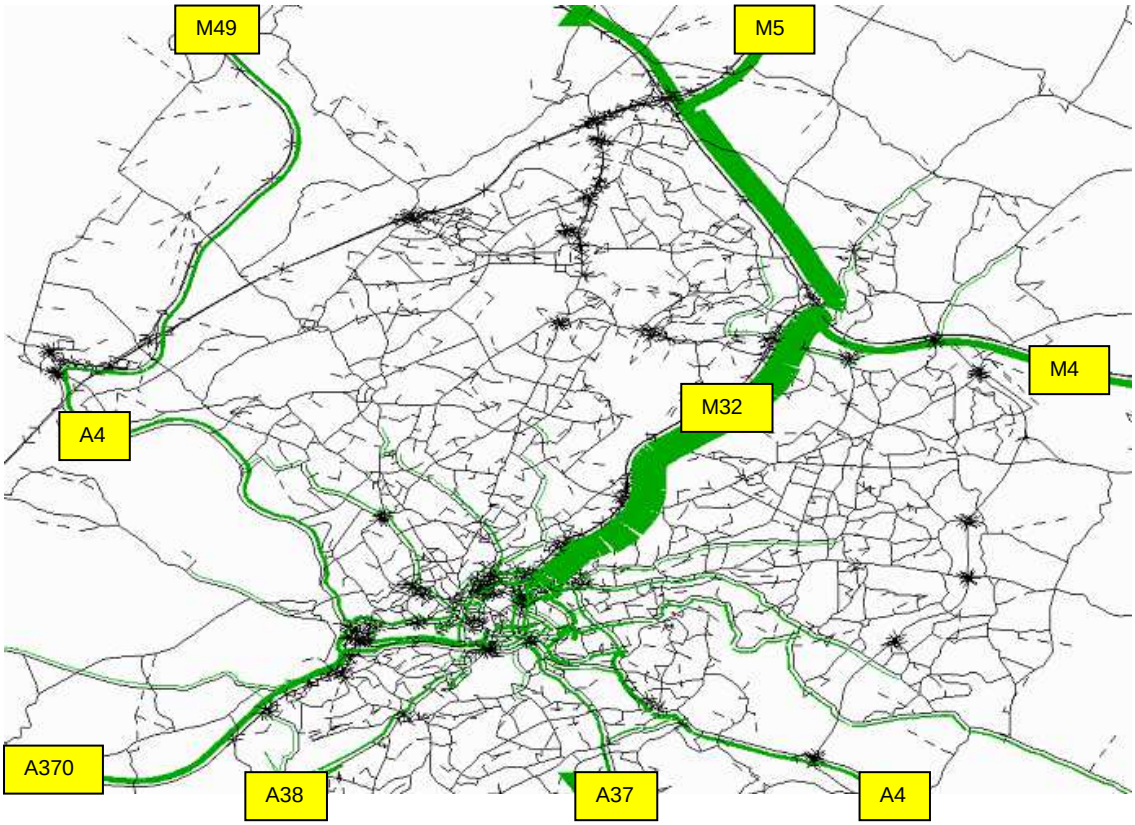
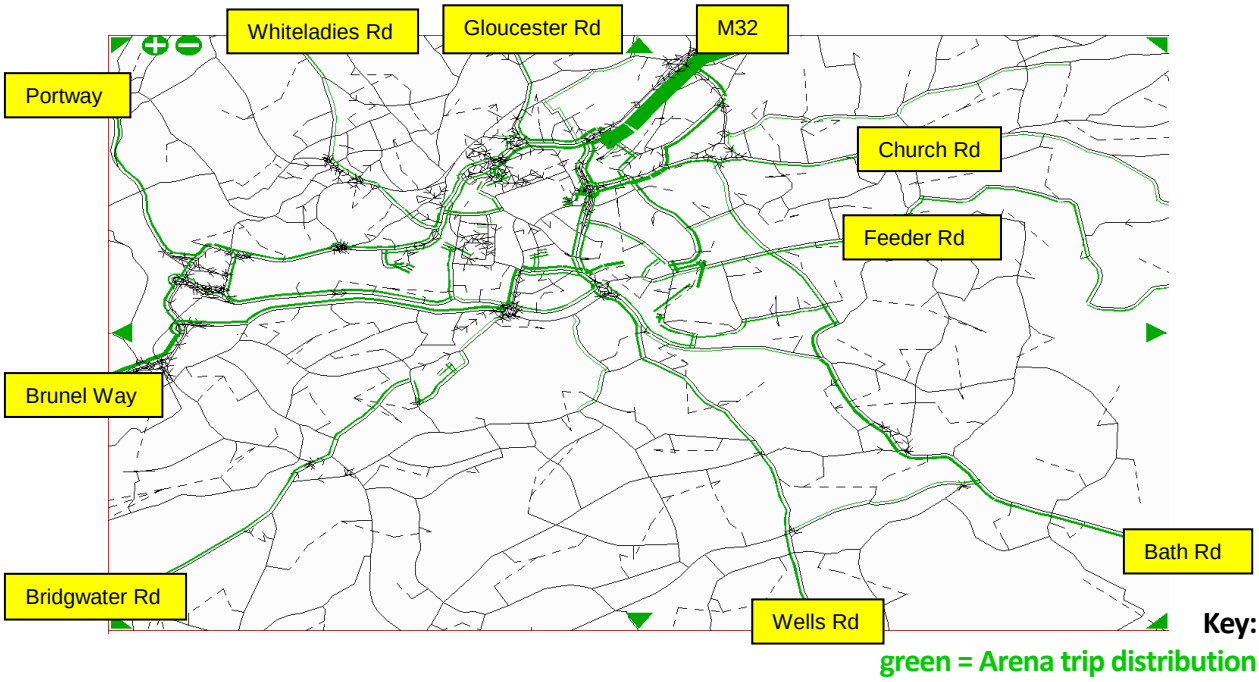


Figure 3.2 GBATS-SATURN model output – 12,000-capacity event, 2021 Arena traffic route choice - weekday evening 1700-1800 - Local



Local Impacts and displacement of traffic

3.2.4 The above outputs confirm the dominance of the strategic highway network as a route choice for visitors attending the arena. However, **Figure 3.2** illustrates how this affects the inner Bristol highway network when alternative travel options are not available. It is clear from the above outputs that whilst arena traffic predominantly approaches inner Bristol along major routes, the availability of highway capacity and the dispersed opportunities for car parking affect the routing patterns of arena traffic more locally.

3.2.5 As a result of the above, a number of local routes are subject to **direct impacts**, where arena traffic uses a given route, and **indirect impacts**, where the additional impact of arena traffic congestion causes non-arena traffic to take alternative routes. These impacts are quantified below for routes not referenced in **Table 3.5**

Table 3.6 Changes in flows on local routes within inner Bristol, 12,000-capacity event - 2021, 17:00-18:00 weekday evening – no mitigation.

Approaches		Location	Dir	Arena trips	Total Change in Flows (all traffic)
North	**A4018 Park St**	s/o Triangle	**SB**	23	+18
	A38 Stokes Croft	n/o St James Barton	**SB**	25	+153
	City Rd	w/o Ashley Rd	**SB**	16	+154
	M32	s/o junction 3	**SB**	488	+114
	A4320 Easton Way	s/o M32	**SB**	72	+106
	A432 Stapleton Rd	w/o Easton Way	**SB**	72	+68
East	**A420 Clarence Road**	w/o Lawrence Hill rbt	**WB**	59	+72
	A420 West St	w/o Clarence Rd	**WB**	129	+172
	Midland Rd	s/o West St	**SB**	57	+27
	Days Rd	w/o St Philips Cway	**WB**	20	+32
	Feeder Rd	e/o Short St	**WB**	32	+38
South East	**Whitby Road**	e/o St Philip's Cwy	**WB**	1	+21
	A4 Bath Road	s/o Sandy Park Rd	**WB**	80	+18
		w/o St Philip's Cwy	**WB**	18	+20
	A4320 St Philip's Causeway	n/o Albert Rd	**NB**	35	+63
		s/o Albert Rd	**NB**	61	+58
	Albert Rd	w/o St Philip's Cway	**WB**	58	+30
	St. John's Lane	w/o Wells Rd	**NB**	2	+41
	A37 Wells Road	s/o Three Lamps	**NB**	39	+68
	St. Luke's Rd	s/o York Rd	**NB**	10	-8
South West	**A38 Malago Rd**	e/o Sheene Rd	**NB**	38	-6
	A370 Coronation Rd	w/o B'minster Bridge	**EB**	75	0
	A38 Redcliffe Hill	n/o B'minster Bridge	**NB**	70	+17
West	**Cumberland Rd**	w/o Wapping Rd	**EB**	57	+14
	Wapping Rd	n/o Cumberland Rd	**NB**	40	+39
	A4 Hotwell Rd	w/o Jacob's Wells Rd	**EB**	50	+26

3.2.6 The impacts quantified in the final column confirm the effects of displacement generated by the arena development. From the above there are three distinct outcomes:

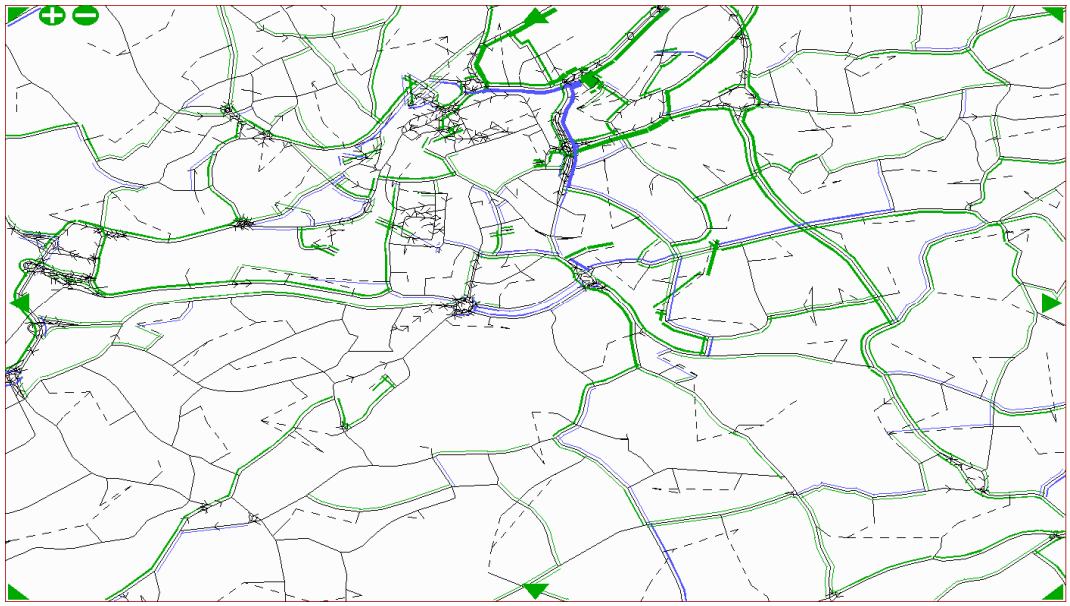
a) **Conventional impact –** development generates additional traffic along a route, increasing the overall total traffic using the route;

b) **Capacity reached / exceeded –** development generates additional traffic along a route, although the total traffic levels do not change, or in some cases reduce;

c) **Displacement impact** – as a result of additional impact of b), non-development traffic avoids the above congestion, generating increased trips on other routes.

3.2.7 The forecasted impacts described above are illustrated below in **Figure 3.3.** Locations that are subject to an overall increase in all traffic are shaded green, whilst routes subject to a reduction in traffic flow (as a result of congestion) are shaded blue. The latter effects can be seen to be most severe along Bond Street, Temple Gate and Avon Street in a southbound direction, along York Road, Redcliffe Way and Feeder Road in an eastbound direction and Bond Street in a westbound direction.

Figure 3.3 GBATS-SATURN model output – 12,000-capacity event, 2021 Change in traffic flow - weekday evening 1700-1800, worst-case



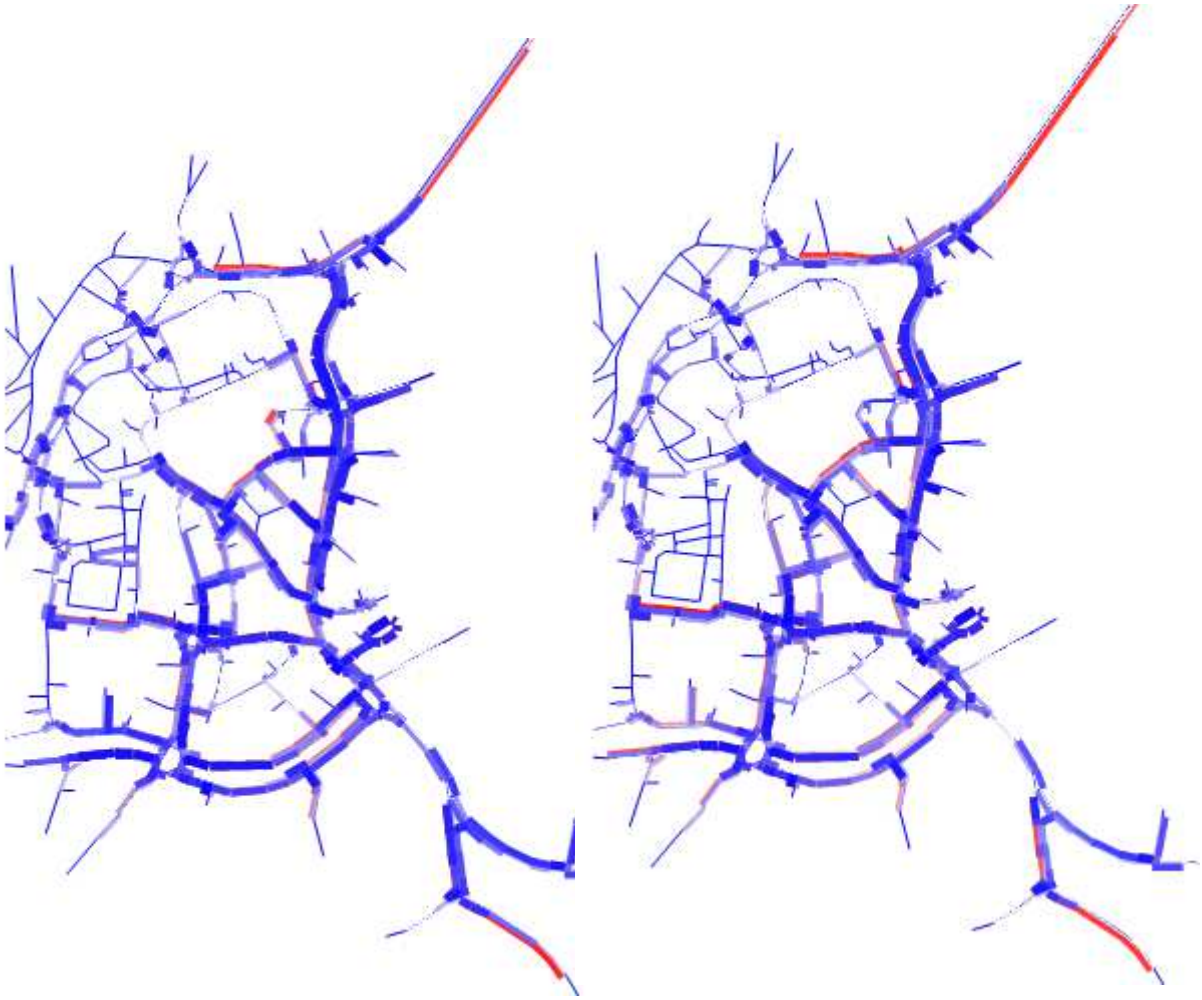
Key: green = increase in traffic flow, blue = decrease

Congestion Impacts – worst-case

3.2.8 The TA has firstly considered the scenario that 80% of arena visitors will travel by car to a weekday or Saturday evening event. These assumptions were agreed with TDM prior to the application and are based upon the current availability of public transport and the absence of late-night rail and park and ride connections to the area. Further, this assumption undertakes no consideration of the forthcoming transport interventions in and around the TQEZ referred to earlier. TDM concur with the submitted TA that this represents an extreme worst-case scenario. In terms of how the arena proposals affect congestion in specific areas, this is illustrated below using outputs from the S-Paramics microsimulation modelling.

3.2.9 The extent of queuing and delay is quantified in the submitted TA, whilst the diagrams below provide a visual representation of the future year extent of existing peak hour congestion (shown blue) and the additional congestion apparent once arena trips are added to the model (shown red).

Figure 3.4 S-PARAMICS model output – 12,000-capacity event, 2021 worst-case - Change in congestion - weekday evening 17:00-18:00 & 18:00-19:00



Key: blue = existing congestion at 2021, red = additional congestion resulting from development

3.3 Summary of Impact Assessment Findings

3.3.1 Taking into account the geographical draw of the arena illustrated earlier, together with the trip generation forecasts, and the absence of current late-night bus and rail based park and ride facilities, TDM draw the following conclusions:

a) **The arena is forecasted to generate a significant 86% of its car trips from outside of the Bristol City Council area. However, 42% of <u>all</u> trips to the arena will originate from within the West of England (former Avon) area.**

b) **A worst-case assessment has been provided which predicts that, without intervention, 80% of arena visitors (for an evening event) will travel by car. This amounts to a maximum worst-case highway demand for a further 3,500 arrivals for a major evening event and roughly a third of this figure for a 6,000-capacity daytime event.**

c) **The highway network will struggle to accommodate the impact of this increase in traffic, whilst during weekend events there will be significant competing pressures upon city centre car parking which is likely to intensify further during peak periods of demand in November and December.**

d) **The available space within which to increase the capacity of the highway network for additional private vehicle traffic is extremely limited. Correspondingly, such an increase in network capacity in one location would encourage a greater level of vehicular traffic than could be accommodated elsewhere on the highway network to the detriment of more sustainable means of transport and environmental quality.**

e) **The submitted assessment indicates that 72% of vehicular trips are forecasted to approach central Bristol using one of the following routes:**

   a. **A4 Portway & A370 Brunel Way (16.4%)**
   b. **M32 (44.3%)**
   c. **A4 Bath Road (11.2%)**

f) **The TA findings forecast that the above routes alone will be subject to an additional demand of just under 2,600 additional vehicles entering central Bristol between 16:00 and 19:00 for an evening event. For a 6,000-capacity Saturday afternoon event, this figure is forecasted to be 914 vehicles.**

g) **In the interests of reducing pressure upon the existing highway network and existing car parking supply, the maximisation of rail and bus-based park and ride facilities accessed from the above routes is a non-negotiable requirement in the interests of minimising the impacts of arena traffic on Bristol's highway network and subsequently its population.**

h) **A package of measures for staff and visitors that incentivises public transport and non-motorised travel, alongside high quality linkages for pedestrians, cyclists and disabled users is fundamental to the success of the Arena project in not only attracting but also increasing sustainable travel and minimising negative environmental impacts.**

i) **The above measures will not be successful without an effective visitor information strategy. This must maximise the use of websites and other electronic media to inform of sustainable travel incentives and discounts, the use of Real-Time Passenger Information RTPI) on and off-site, as well as Variable Message Signage (VMS) to inform motorists of Park and Ride facilities before they enter Bristol, and where vehicles do enter the urban area, accurate and effective real-time information concerning car parking availability is readily available.**

4.0 HIGHWAY AUTHORITY REQUIREMENTS

4.1 Walking and Cycling

4.1.1 The situation of Arena Island relative to its topography and surroundings provides significant challenges to meet the Highway Authority's requirement for safe and permeable access from all directions and for all modes of travel.

4.1.2 Notwithstanding the interventions explained in section 2.1, which comprise: the delivery of new HCA bridge (Planning ref: 09/03006/F); the current application for the St Philip's footbridge linking to Albert Road (ref: 16/00222/F); the approved harbour pontoon walkway linking to Friary (ref: 15/03772/F) and the Temple Gate / Temple Way improvements (to be completed by mid-2017), a number of constraints still exist which require to be addressed by the Arena Project.

4.1.3 The following issues were raised at the pre-application stage by TDM as existing walking and cycling constraints that are directly related to the application in question and require to be addressed as part of these proposals:

a) Bath Road Pedestrian / Cycle Access

b) Potential for arena-visitors crossing Bath Road at dangerous locations;

c) Circuitous and long walking routes to access arena island from Temple Meads and the west;

d) Poor pedestrian environment to the east of the site along Albert Road, Victor Street, Feeder Road, Avon Street and throughout St. Philip's;

e) Cycle / disabled access and permeability through the site.

f) Signage

4.1.4 The above issues are addressed in turn in the following paragraphs.

Walking and Cycling – TA Assessment

4.1.5 The submitted TA includes (in **Appendix B**) a walking and cycling audit of the area surrounding the development site for the area that is measures to be within a 20-minute walking distance. The assessment is split into four key areas and considers the likely routes pedestrians and cyclists are likely to take to access the arena site. A number of these routes shall be subject to improvement as part of the RIF proposals, including along Cattle Market Road (which will be subject to closure on large event days), a new pedestrian / cycle route alongside the harbour pontoon walkway (linking to The Friary), and the new pedestrian footbridge to St Philip's and the Avon riverside. However, the outstanding matters detailed in points a) – e) above require further scrutiny.

a) Bath Road Pedestrian / Cycle Access

4.1.6 TDM welcome the provision of new pedestrian / cyclist accessibility to the site from Bath Road. This is required in the interests of highway safety and also the overall permeability of the TQEZ area, which is required through the Bristol

Central Area Plan to ensure permeability by non-motorised users. The pedestrian / cycle access is shown indicatively on a number of the submission drawings. However, very little detail is shown and the drawing submitted at **Appendix I** of the TA. As such there is very little to go on to assess the suitability of the proposal.

4.1.7 High quality permeability through the site for pedestrians and cyclists is non-negotiable and is required in order to be compliant with BCAP policy. Similarly, pedestrian and cycle access from the A4 Bath Road is an access to the site and should not be considered as mitigation;

4.1.8 TDM understands that this access is subject to a more detailed structural assessment of how a widened walkway / cycleway will be supported. As such and in the absence of further detail, TDM requires that this access is operational by the time of the first event at the arena, subject to the following:

- **The delivery of a minimum 5m width to accommodate access from Bath Road for pedestrians and cyclists;**

- **The design of the walkway must be agreed with BCC's Highway Structures team before a decision is made upon which type of supporting structure is to be used. Following this, the access can only be constructed following a formal Structural Agreement in Principle (AiP). To not do so risks future safety and maintenance liabilities for BCC.**

- **The requirement for a Vehicle Restraint System (VRS) between Bath Road and the site and the need to provide adequate visual screening for VIPs within the service yard should be combined. This will maximise the usable width of this facility and avoid conflicts between users at times of peak demand.**

4.1.9 A condition will be required to include the above requirements to ensure this linkage is delivered to the satisfaction of the Highway Authority.

b) Potential for arena-visitors crossing Bath Road at dangerous locations

4.1.10 The above issue is of serious concern to the Highway Authority, particularly for a use such as the arena which will generate thousands of pedestrian movements and in a confined time period. Whilst it is positive that the access to Bath Road improves permeability to the west of the site, concert-goers heading in the opposite direction towards / from Bedminster and Redcliffe (via York Road and Clarence Road) may attempt to cross Bath Road at a potentially dangerous location where they will be faced with either fast-moving traffic (late at night), or walking between queuing traffic (before or after a daytime event). This issue, coupled with the narrow footways to the north west and the likelihood of dropping-off / picking up from Mead Street is largely unsatisfactory, generates conflict with existing users and warrants the following post-permission intervention:

- **As part of the Event Management Plan, a strategy for the safeguarding of pedestrians along Bath Road between the arena and the Bath Bridges gyratory must be submitted and agreed in writing by the Planning Authority. Such a strategy must remove the ability for pedestrians to cross Bath Road at unspecified / informal locations and insodoing remove the potential for collisions involving pedestrians.**

c) Circuitous walking routes

4.1.11 Linked to the above, TDM consider it unlikely that concert-goers wishing to enter / exit an event to or from the west, particularly towards Bedminster / Redcliffe, but also towards Victoria Street and even Temple Meads will enter or exit the arena site via the main access bridge and Cattle Market Road when a more direct route (by some 250 metres) exists along Bath Road. Although those accessing Temple Meads / Victoria Street are less likely to cross Bath Road until reaching a crossing, the arena will be very visually prominent from the westerly direction for arrivals and human nature is to walk towards the building you are wishing to enter, particularly when it is visually prominent. The following requirement must therefore form part of an Event Management Strategy to be submitted and agreed in writing prior to construction:

Pedestrian movements between the arena and Bath Bridges roundabout require to be either a) prohibited through stewarding or b) subject to a form of physical barrier / guardrail be provided to ensure pedestrians cross Bath Road at formal crossing facilities and not into live traffic. This must also take account of the need for existing pedestrians and cyclists (not associated with the arena) to safely navigate the existing footway. These measures shall be implemented / operational upon first occupation of the development.

d) Poor pedestrian environment to the east

4.1.12 The TA recognises the industrial nature of the highway network in the St Philip's area and this is highlighted in the audit in Appendix B. Of particular concern is how Albert Road and the area to the east, whilst implementing a number of formal pick-up / drop-off areas for coaches and taxis, is also likely to be attractive to drop-offs / pick-ups by general traffic given the event-day closure of Cattle Market Road and the difficulty of picking up / dropping off from Bath Road.

4.1.13 TDM welcome the proposed closure of part of Albert Road to ensure that through traffic is deterred from causing conflict with coach and taxi pick-ups and drop-offs. However, the extent of road closure is limited and therefore it is likely that drop-offs / pick up from general traffic may still take place close to this area. The pedestrian environment along these routes is poor and is characterised by narrow footways, poor surfacing, ineffective lighting and a lack of crossing facilities. A condition is required in connection with the following, to be implemented upon occupation of the development. More detail on this requirement is provided in section **4.5.7.**

The upgrading and widening of current footways along Albert Road, Victor Street, Stanhope Street, Victoria Road and Feeder Road where appropriate to incorporate the provision of crossing facilities, lighting, surfacing, footway and carriageway reconstruction where necessary is required in view of the number of additional movements taking place in this area to ensure arena visitors benefit from safe and high quality non-motorised linkages to the site.

e) Cycle permeability through the site.

4.1.14 The site has a number of topographical constraints, particularly in terms of the ability for cyclists / disabled users to cross the site from south to north and vice versa. This presents a serious problem and could potentially jeopardise the

delivery of convenient non-motorised linkage and therefore permeability through and to the wider TQEZ. TDM require this to be resolved. At the time of writing, the applicant is currently exploring the possibility of a ramped access to ensure cycle permeability through the site. Whilst a lift is proposed on the western side of the site and supported (subject to some comfort being provided on how it will be effectively maintained), this is not ideal and does not fit with the policy and aspirations of BCC. A condition is therefore required in relation to the following to be implemented prior to the first event or at a stage otherwise agreed by the planning authority:

The implementation of permeable cycle and pedestrian linkage through the arena site between Bath Road and the River Avon bridges on the north and eastern side of the site to ensure a safe, convenient and continuous pedestrian and cycle linkage to and through the site.

f) Signage

4.1.15 Reference is made in the submitted TA to the need to effectively sign Arena Island in such a way as to encourage walking and cycling movements to and from the site, but also to ensure that such routes are safe, legible and avoid conflict, not just between non-motorised users and traffic, but also to minimise conflicts between pedestrians and cyclists. Certain areas of the city centre currently benefit from existing information in the form of wayfinding posts, monoliths, markerposts and defined routes. However, current routes surrounding the arena are poorly defined, obstructed by busy roads or hindered by topography. As a result, TDM recommend a condition to ensure the following requirements are met:

Agreement and implementation of a high quality signage strategy for pedestrians, cyclists and users with specific mobility requirements, linking the arena with other key destinations including (but not limited to) Brislington, Totterdown, Redcliffe, the Centre, Castle Park, Broadmead, Old Market, Easton and St Philip's. Such a strategy must make provision for the installation of and updating of existing directional signs and information monoliths in the above areas and further afield where cycle route signage presents a viable opportunity to provide further information.

4.2 Rail Connectivity

4.2.1 The geographical draw of visitors to the Arena is identified in the supporting business plan as being within a 60 minute drive time which extends outside of the former Avon area and includes other major settlements including Cheltenham, Gloucester, Swindon, Taunton, Bath and Newport although it should be noted that it can often, at peak periods, take one hour to reach the arena by car from within BCC's own boundary. As a result, it is imperative that Rail-based Park and Ride services form an integral part of the Arena package to deter / discourage motorists from entering Bristol, particularly during the weekday evening peak hour.

4.2.2 An assessment of the current rail timetables reveals that the following locations within the assumed radius do not currently benefit from a rail connection any later than 22:30 on a weekday evening: Bristol Parkway, Gloucester, Cheltenham, Swindon, Chippenham, Warminster, Salisbury, Weymouth and Dorchester. The time of 22:30 is identified by the Arena Operator as being the earliest curfew for

evening events and therefore rail travel to the above locations will not be possible unless visitors leave events early. On a Saturday late rail connections decrease further and exclude locations along the Weston-super-Mare, Bridgwater, Taunton and Exeter line due to the need for track possessions for maintenance purposes.

4.2.3 Visitors attending concerts from the west (Cardiff / Newport) by train would be reliant on arena events finishing by 22:30 at the latest in view of the latest trains being at 22:55 at the weekend, and during the week use the same service, or wait for a further two and three-quarter hours for the last train (01:37). In both cases it is hard to imagine visitors to the arena from Wales, Gloucestershire or Wiltshire travelling by any other means than car unless a rail or bus-based park and ride service is made available.

4.2.4 The absence of late night trains, particularly to Bristol Parkway will cause significant problems on Bristol's highway network if there is no alternative to car travel from outlying areas of the region in view of the geographical pattern of trip distribution given that for a weekday evening, 80% of the arrivals are forecasted to arrive in Bristol between 16:30 and 18:30 hours.

4.2.5 TDM has previously requested an earlier curfew of 22:00 for night-time events to coincide with public transport. However, this was widely rejected by the arena project team and operator due to incompatibility with performance times and tour schedules. This is disappointing, and as a result, if events are unable to flex to accommodate the surrounding public transport, the Arena Project must ensure that public transport changes to accommodate events. The constraints associated with rail connectivity are summarised below.

a) the absence of late-running trains to a sizeable area of arena catchment.

b) where the above is an option, the capacity of existing rail services and facilities to accommodate the level of demand generated by arena events.

4.2.6 It is unfortunate that the planning system is unable to secure the provision of rail services as a direct condition of this application (given that the approval and infrastructure is reliant on third parties), as it is clear that such an alternative is fundamental to the success of the development and the minimising of impacts upon the highway network and associated health of Bristol and its inhabitants.

4.2.7 In relation to the above, TDM have insisted that early dialogue takes place between the Arena Project Team and the rail companies to address the issue at the earliest opportunity in the interests of promoting sustainable development.

Bristol Parkway Station

4.2.8 The applicant has submitted evidence of discussions that have taken place between the Arena Project Team, Great Western Railway (GWR) and Network Rail, as it is equally important that if rail services are provided, then the track must be made available upon which to run such services. There is some encouragement that the possibility of a late-night connection to Parkway is recognised by GWR, who confirm as follows:

"GWR shares in principle the BCC aspiration for there to be later last trains from Bristol Temple Meads to accommodate passengers leaving the venue after evening events. Services between

2300 and 0000 are clearly essential to make this realistic.

…There are current services to both Weston and Bath that would, with some possible strengthening, accommodate the likely demand for homeward travel from the Arena development on week nights.

…Whilst GWR is willing to run additional services, subject to the necessary approvals, the costs of doing so must be fully covered and a number of constraints understood. These include the availability of track access, rolling stock and train crews, and the cost of operation.

…The introduction of Super Express Trains brings with it the requirement to run empty trains at end-of service from Bristol Temple Meads to Stoke Gifford depot.

…The independent analysis has highlighted that there is a real possibility of utilising one of these as a high capacity late evening service to Bristol Parkway, which could act as a Park & Ride hub for the M4 and M5 corridors and parts of northern Bristol.

…GWR will be pleased to undertake this analysis as plans for the Arena operations are finalised. In the meantime I can assure you that the impact of the BCC Arena development on rail service demand is now very much a part of the company's future timetable and resource planning process."

4.2.9 The submitted TA suggests, following discussions with GWR that an arena-specific rail connection could accommodate up to 1,260 passengers through the provision of two 9-car services, each accommodating 630 passengers, running between Temple Meads and Bristol Parkway, as described above.

4.2.10 Taking into account the assumed car occupancy of 2.4 passengers referenced earlier, such a service could effectively remove 525 peak period vehicle trips from the highway network. Suggestions from GWR above consider that such trains would already be making this journey as a result of the need to accommodate returning trains from London overnight at the new Stoke Gifford depot.

4.2.11 The above proposal would of course depend upon there being availability of car parking at Parkway Station and this, amongst other matters, including routes to other locations requires further scrutiny and assessment before such a service can be finalised. A further matter arises in relation to Network Rail's requirement to undertake track possessions over the weekend to conduct engineering works. However, at the time of writing there are encouraging signs that such services will be implemented to compliment events at the arena.

Portway Park and Ride Rail connection

4.2.12 The adopted Joint Local Transport Plan and Bristol Local Plan both reference the opportunity for a railway station connected with BCC's existing Park and Ride site alongside the Portway. Referring to the trip generation analysis presented earlier, such a facility would be of considerable benefit to arena visitors, when taking particular account of the 16% of vehicular trips which are forecasted to enter Bristol from the M49, A370 and A369. This percentage could increase further, if such a facility were to attract further movements from the M5, M4, the M49 and the M48, reducing pressure upon both Bristol Parkway, the M32 and Long Ashton Park and Ride.

4.2.13 Calculations within the submitted TA suggest that of the existing stock operating along the Severn Beach line, a typical (1-carriage) service could accommodate around 100 passengers, although the platform length at a new Portway station could feasibly accommodate services carrying up to 400 passengers. However, there are a number of constraints to services on this line due to its single track working and the restrictive possessions regime. Whilst a rail service from Portway is unlikely to be operational in time for arena opening, the demand generated by the arena should be a key factor in future discussions.

4.3 Bus Connectivity

Park and Ride

4.3.1 The existing Park and Ride facilities at Brislington, Ashton Vale and Portway are not currently operational on evenings and Sundays. In accordance with the pre-application requirements of TDM, the arena project team has carried out a financial feasibility assessment for the running of Sunday and late-night Park and Ride services to each of the above sites to coincide with arena events.

4.3.2 Following the trip generation and impact assessments referred to above, TDM considers it essential that Park and Ride evening services are provided to offer a realistic alternative to car use for the Arena. The locations of the sites on the A4 to the east and west of Bristol, as well as along the A370 are key entry points to the city for arena trips as demonstrated earlier and have the ability to intercept a sizeable amount of the 35% of trips that are forecasted to approach the arena along these radial routes.

4.3.3 In relation to the detail, it is considered by the TA that Park and Ride services would be operational for evening events attracting a 9,000+ attendance (45 events per annum). Such services are suggested by the TA to be operational from Brislington and Ashton Vale which alone present the opportunity to transport 1,530 visitors to the arena and in so doing remove around 640 vehicles from the highway network.

4.3.4 TDM questions the 9,000 threshold for running these services. Whilst the TA considers that for events of 6,000 spectators or lower, the impact of congestion on the highway network does not warrant investment in such an alternative, TDM has challenged this on the basis of highway network operation at present, in particular the lock-ups that have occurred in central Bristol in recent months and query whether the months of November and December should be considered for a lower threshold in view of the increased demands that are placed upon the highway network and parking supply in the run-up to Christmas, taking into account the evening shopping hours and the high concentration of events at arenas elsewhere in the run-up to Christmas. It would not be acceptable in highway terms to ignore this matter given the further implications for parking.

4.3.5 A further requirement relates to the visibility and attractiveness of Park and Ride. This is not just in terms of the necessary stewarding and signage within and outside the arena, but also in relation to the marketing, promotion and incentives that are offered to arena visitors, along with driver information that encourages the removal of vehicle trips from Bristol's highway network. The requirements for Park and Ride will need to be set out in a condition as follows:

- **Prior to commencement of the development, an Arena Park and Ride Strategy shall be submitted and agreed in writing by the council. The provisions of the approved Park and Ride Strategy shall be implemented upon the first major event at the arena, as defined by the following requirements to the satisfaction of the Council:**

- **The Park and Ride Strategy shall include the following details:**
  - **a) The proposed thresholds for the operation of each of the Park and Ride services at Brislington, Portway and Ashton Vale;**
  - **b) The location, frequency, timings and capacity of each Park and Ride service and the size/type of events to be served;**
  - **c) How the routes will be signed, marketed and Park and Ride usage encouraged through effective fare structures, incentivisation and the delivery of Variable Message Signage (VMS) on strategic approaches to Bristol;**
  - **d) Locations for the setting down and picking up of passengers within easy walking distance of the arena site;**

Regular (Non Park & Ride) Bus Services

4.3.6 This is an important matter that cannot be overlooked. As confirmed above, 42% of arena visitors are forecasted to arrive from the former Avon area, which accounts for just over 5,000 of spectators who would consider bus as an option, subject to routes / frequencies being reasonable.

4.3.7 The siting of the proposed arena development is sensible in that it is located within close proximity to a major transport hub in and around Temple Meads station. As detailed in the submitted TA, Temple Gate is served by numerous bus services that provide connections along the A4 to the south east and in the opposite direction to the north and north west of the city. The frequency of such services however reduces during the evening period to the extent where the following locations are served by bus services after 23:00 hours:

23:30 Centre / Clifton / Redland **(Service 8/9)**
23:44 Montpelier / Bishopston / Horfield / Filton / UWE **(70/71)**
23:21 / 23:51 Knowle / Hengrove **(50/51)**
23:10 / 23:25 / 23:40 / 23:55 Henbury / Brentry / Southmead / Westbury / Henleaze / Clifton / Brislington / Broomhill / Stockwood **(1/2)**
23:08 / 23:47 / 00:36 Brislington / Keynsham / Bath **(38/39/X39)**
23:02 /23:36 Whitchurch / Brislington / Keynsham / Radstock / Bath **(178 / 376)**

4.3.8 The above services can be caught either via Temple Gate or Temple Meads ramp. In relation to the passenger facilities along Temple Gate, these stops will be subject to considerable improvements as part of the RIF improvements referred to earlier. These improvements incorporate increased passenger protection and information through the delivery of improved length and specification of shelters, real-time passenger information, raised kerbs and lighting.

4.3.9 It is however recognised by TDM that Temple Gate is not connected to all areas of Bristol by bus. For instance, much of east Bristol as well as locations to the south and west are not served by direct routes from Temple Gate. In relation to this,

numerous services are accessible via Old Market **(6,7,13,24,40,43,44,45,48,49)** and serve Easton, Lockleaze, St George, Eastville, Fishponds, Speedwell, Kingswood, Hanham, Staple Hill and Downend to the north / east, and Ashton Vale to the west. Bus access to Avonmouth, Shirehampton and Lawrence West is however noted and that these areas could be considered in the context of progressing Park and Ride / Rail services from Portway.

4.3.10 Taking into account the forecasts provided earlier in Chapter 3, 42% of arena visitors are forecasted to attend the arena from within the former Avon area. However, the application at present proposes no service enhancements to regular bus services in the area. TDM are aware that this matter has also been raised by North Somerset Council. TDM concur with this concern and therefore seek a condition as follows:

- **Prior to commencement of the development, a Public Transport Strategy shall be submitted and agreed in writing by the council. This shall include the following details:**
  - **a) Confirmation of likely additional demand for regular bus services serving Temple Gate and Old Market;**
  - **b) Enhancements to frequency and capacity of services to coincide with arena events and associated thresholds to be confirmed.**
  - **c) Further detail on the capacity of existing infrastructure (i.e. stops) to accommodate additional services during peak periods of demand.**
  - **d) The installation of Real Time Passenger Information (RTPI) displays within the Arena Island site in a prominent location**

Reduced Traffic Impact resulting from Rail and Park and Ride

4.3.11 Taking into account the implementation of bus and rail-based park and ride alternatives and the removal of car trips from the highway network referred to above, the submitted TA includes an assessment scenario of the impacts of a 12,000-capacity arena event on the highway network in the event that firstly, Park and Ride Services are operational from both Brislington and Ashton Vale, and secondly, bespoke late-night rail services to Bristol Parkway Station are implemented to serve the arena. The positive impact this will have upon visitor mode shares is forecasted in the table below and will need to form the basis of future mode share targets as part of the Travel Plan process.

Table 4.1 Revised Mode Shares following Park & Ride and Rail Interventions

Mode of Travel	Weekday / Sat evening Mode Shares (12,000 event)			
	TA Worst-case	TA+ P&R	TA + P&R + Rail	Net
Car Occupant	80%	67%	57%	**-23%**
Car Trips	**4,000**	**3,360**	**2,835**	**-1,165 trips**
Park and Ride	0%	**13%**	**13%**	**+13%**
Bus	5%	5%	5%	-
Coach	2%	2%	2%	-
Rail	4%	4%	**15%**	**+11%**
Taxi	2%	2%	2%	-
Walk and Cycle	7%	7%	7%	-
TOTAL	**100%**	**100%**	**100%**	

4.3.12 The above illustrates the importance of improvements to public transport connections to the arena site and also reinforces the need, as stressed above to provide further consideration of the demands that will be placed on existing public transport services in view of the low forecasted 5% mode share and the 42% draw from the former Avon area. The above percentages will require to be monitored as part of an ongoing Travel Planning process which shall be secured by condition.

4.3.13 The revised traffic assessment figures have been modelled using the Saturn and S-Paramics modelling tools to understand the impact on the local highway network. The trip reductions are forecasted along key corridors along the local highway network over the three hour evening peak period as follows:

Table 4.2 Forecast reductions in arena traffic resulting from Park and Ride

Route	Trip Reduction resulting from P&R	Trip Reduction resulting from Rail	P&R and Rail Reduction
A4 Bath Road	-118		**-118**
A37 Wells Road	-128		**-128**
A38 Bedminster Pde	-97		**-97**
A370 Coronation Rd	-74		**-74**
A38 Stokes Croft		-146	**-146**
M32		-165	**-165**
A420 Old Market		-157	**-157**
Other routes	-223	-57	**-280**
TOTAL	**-640**	**-525**	**-1165**

4.4 Parking Restraint

4.4.1 The ability for arena visitors to change their mode of travel from the 80% worst-case is being enhanced through the addition of late-night park and ride facilities which will be monitored and evaluated over time to ensure they continue to provide an effective and well-used service.

4.4.2 As the above forecasts confirm, it will not be possible to contain all vehicle trips generated by the arena within bus or rail-based park and ride sites, nor is it possible for every arena visitor to have access to direct bus or rail connections, particularly those travelling from locations further afield. Where it is possible to install signage directing motorists towards car parks with spaces, this will be implemented. However, with such uses as stadia and arenas, there is inevitably a propensity for motorists to attempt to park in the areas surrounding these sites, often up to 20-minutes' walk away from the venue in question.

4.4.3 TDM identify the following undesirable impacts that could be generated in the event that restrictive parking controls are not delivered upon occupation of the arena. These are as follows:

a) **Highway safety impacts as a result of pavement parking, blockage of accesses and obstruction to visibility splays, pedestrians, cyclists, emergency vehicles and disabled users;**

b) **Environmental and amenity impacts resulting from increased traffic and parking demands that are unable to be accommodated within residential areas, without significant displacement of existing parking resulting in the**

issues raised in a);

c) Overspill parking resulting in impacts which cause obstruction to the operation of local industry;

4.4.4 The applicant is willing to address these matters through a series of additional parking controls that seek to eliminate arena visitor parking from a number of areas on occasions when arena events take place. The specific measures implemented and extent of this area cannot however be confirmed as the progressing of such controls are subject to further public consultation and separate legislation under the Highways Act. TDM therefore recommend that the following condition is imposed upon the development.

Prior to commencement of the development, a strategy for the investigation, consultation and implementation of a series of parking controls shall be submitted and agreed in writing. This strategy should confirm the scope of survey work required to understand the likely extent of parking overspill generated by the arena and should include but not be limited to:

i. Redcliffe, Bedminster East, Windmill Hill, Totterdown, Knowle, Arno's Vale, St Philip's Marsh, The Dings and Barton Hill with consideration of the following potential changes:

ii. The extension of time periods for existing parking orders

iii. The creation of new orders prohibiting parking in certain locations

iv. Proposals for event-related Residents' Only orders

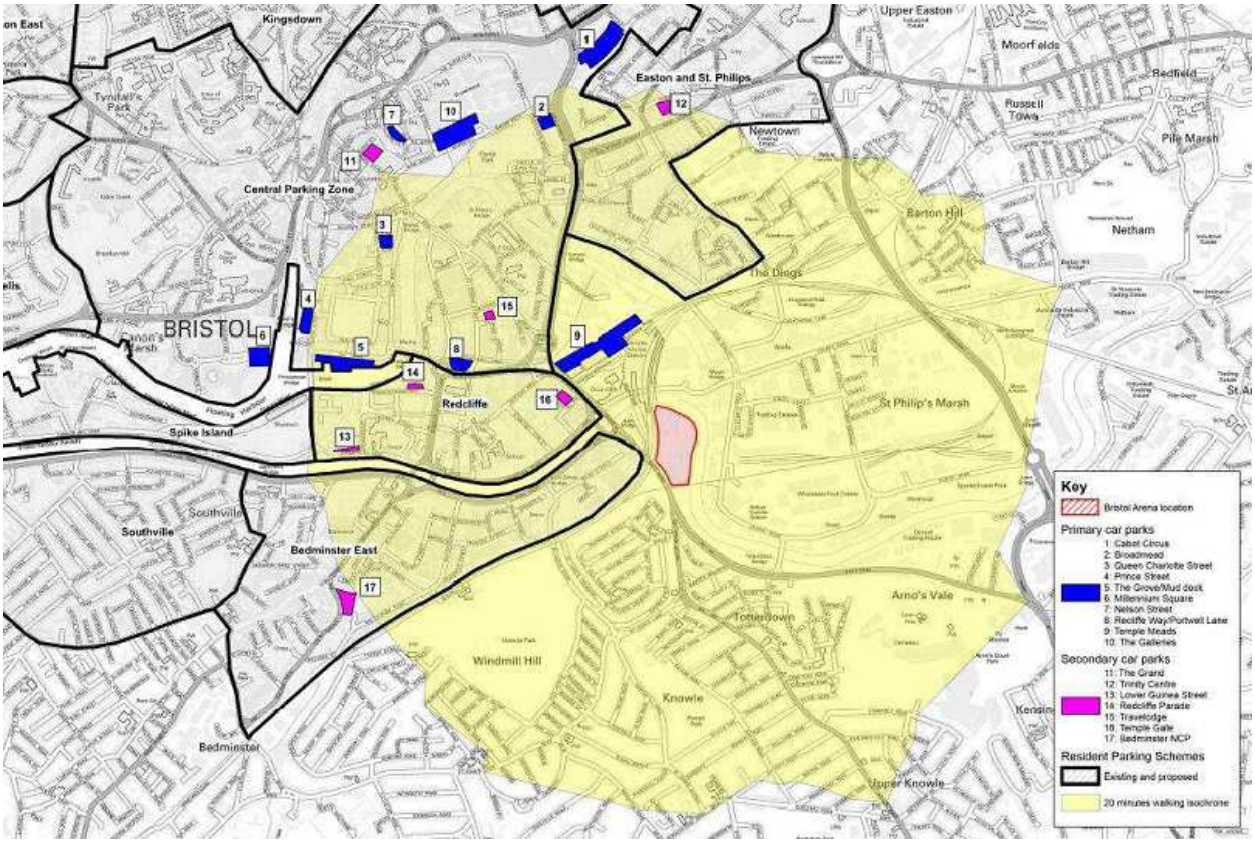
v. Proposals for loading bans, coach / taxi facilities and the prohibition of short-stay pick-up / drop-off traffic.

The full cost of the additional restrictions that are directly related to the arena will need to be met by the Arena project. This is likely to include, but not be restricted to the following costs which would otherwise be borne by BCC's Transport division:

- **Undertaking surveys**
- **Public Consultation**
- **Design work**
- **Traffic Regulation Orders (TROs)**
- **Implementation of restrictions including line-painting, signage, lighting and any adjustments to the highway eg. kerb adjustments.**
- **The enforcement of restrictions that are operational during the course of arena event**

4.4.5 The plan below provides a useful basis upon which to undertake further assessment, as it provides an analysis of where existing Controlled Parking Zones exist, in comparison with a reasonable walking distance assumption of 20 minutes from the arena site. TDM view that this highlights clearly the areas that are likely to be subject to pressure for on-street parking.

Figure 4.1 Existing Restricted Parking Zones and 20-minute walking isochrone



existing Residents / Controlled Parking Zones outlined **black**, 20 minute walking isochrone shown yellow

4.5 Picking-up / Dropping off facilities

4.5.1 The difficulty of accessing the arena island site is explained earlier in this report. However, this becomes particularly difficult when dropping-off and picking up movements are considered. Whilst public transport services will benefit from existing facilities that are to be improved in and around Temple Gate, the requirements for the additional movements generated by the arena need to be seriously considered to avoid detriment to highway safety. Each requirement is considered in turn below.

Disabled Visitors

4.5.2 The Arena Masterplan includes for a total of 45 parking spaces for disabled visitors. It is expected that such spaces will need to be pre-arranged or pre-booked and for the necessary ticket / pass to be shown to stewards at the point of entry. Similarly there will need to be adequate controls / access arrangements to allow such visitors to exit the arena site without generating conflict with other movements. Similarly, the prevention of entry to non-valid vehicles requires thought.

4.5.3 Of some concern to TDM however is how disabled visitors who do not have access to a pre-booked parking space will be suitably dropped-off and picked up at a location which is close enough to the arena entrance so as to avoid a difficult journey between their chosen mode of transport and the arena entrance. The Arena Project Team has suggested some form of shuttle bus between a designated city centre car park and the arena site, although it is queried how such

a service will be secured for disabled users and not open to misuse. This is an area where there is more thought required and TDM expect the issue of disabled access, picking up and dropping-off to be fully addressed as part a future Event Management and Travel Planning document to consider the following:

Prior to commencement of the development, and as part of the overarching Event Management Plan the applicant is required to consider and submit a strategy to ensure that disabled visitors who have not pre-booked a parking space are able to safely access the arena.

Taxis

4.5.4 The previous forecasts indicate demand for up to 100 taxis for a 12,000-capacity event on the basis that 2% (240) of visitors will choose this means of travel to arrive at / depart from the arena. Within the TA it is anticipated that the access ramp for Temple Meads station will accommodate the demand for taxi boarding and alighting for daytime events although there is no quantification of existing and future capacity of this facility, nor is there any evidence of dialogue between the Arena Project Team, taxi operators and Temple Meads station management. This requires further discussions and resolution prior to occupation of the arena.

4.5.5 In relation to the requirements of taxi users for evening events, a potential taxi waiting facility is referred to at the western end of Feeder Road close to its junction with Avon Street and Cattle Market Road. It is unclear what capacity such a facility will have although it will require to be protected from misuse by an appropriate TRO.

Prior to commencement of the development, and as part of the overarching Event Management Plan the applicant is required to consider and submit a strategy to ensure the provision of safe facilities for taxi-based picking up and dropping off.

Coaches

4.5.6 The planning submission proposes the implementation of a coach drop-off / pick-up zone along Albert Road to cater for up to nine coaches to use Albert Road for the boarding and alighting of passengers prior to and following arena events. It is proposed that during these times, the section of Albert Road between Stanhope Street and Feeder Road will be closed to traffic, apart from vehicles with access rights between 18:00 and 00:00 hours for an evening event.

4.5.7 The suggestion of a closure to all traffic within this zone is sensible given the level of pedestrian / vehicle / coach conflict that could arise, as is the implementation of parking restrictions that ensure that only coaches are able to use specially designated bays. The above will be subject to the necessary TRO and this will require to be advertised locally as part of the need to address parking in the wider St. Philip's area as referred to above. This requirement should be conditioned as follows:

No development shall take place until a general arrangement plan showing the following works to the highway have been submitted to and been approved in writing by the Local Planning Authority

- **The upgrading, widening and reconstruction (where necessary) of current footway / carriageway along Albert Road, Victor Street, Victoria Road, Chapel Street and Stanhope Street and Feeder Road where appropriate to incorporate the provision of crossing facilities and carriageway and drop-off / pick-up facilities for coaches and taxis.**

- **The implementation of improved / upgraded lighting, where necessary to take account of evening events**

- **A scheme for the appropriate management of traffic in the above area through the provision of access and waiting restrictions to be secured as part of the TRO process referred to earlier.**

4.5.8 The normal mechanism for securing such works is through section 278 of the Highways Act, which allows third parties to enter and carry out works on the adopted highway, subject to obtaining of technical approval from the Transport Development Management team. Regardless of the above, the above requirements will require to be submitted and discharged prior to construction to ensure the highway authority have adequate sight of the proposals and that the works are carried out in accordance with BCC requirements. This will have a long lead-in time given the need to consult internally as well as externally.

General Traffic pick-ups / drop-offs.

4.5.9 TDM maintain a concern that provision for pick-ups and drop-offs by general traffic (including private hire vehicles) has been largely discounted within the TA as a result of the disadvantages that the promotion of such a facility would bring, possibly drawing more traffic to an area that is not particularly equipped to accommodate such movements. This would be a difficult stance to take and is unlikely to be acceptable given the likelihood of indiscriminate and uncontrolled dropping-off / picking up in such a way as to threaten highway safety. A major concern relates to picking up, where vehicles are likely to be parked for longer and in undesirable locations which could cause blockage to pedestrians, cyclists and emergency / service vehicles. A condition is therefore required to address this concern:

Prior to commencement of the development, and as part of the overarching Event Management Plan the applicant is required to consider and submit a strategy to ensure the provision of safe facilities for drop-off and pick-up movements associated with the development to be agreed in writing prior to commencement of development.

5.0 LAYOUT, MASTERPLANNING & SITE MANAGEMENT

5.1 Introduction

5.1.1 Essential to the success of the masterplan is the achievement of a layout that ensures high quality permeability, surveillance and accessibility for all users. This is backed by national and local policy, in particular the Bristol Central Area Plan **policy BCAP35** for the Temple Quarter Area, which requires development to include:

- **New walking and cycle routes to connect the developments to the rest of the city centre and surrounding neighbourhoods;**

5.1.2 This principle is furthered in policy **BCAP33**, in relation to *Key* city spaces:

- **Development on or adjacent to key city spaces will be expected to provide an appropriate level of public realm improvements having regard to the role of each space. Improvements should help to deliver fully accessible spaces.**

5.1.3 The above requirements are accompanied by Site Allocations & Development Management Policy **DM23**, concerning the expectations of development:

- **Development…. will be expected to provide:**

  iv. For pedestrians and cyclists including, where appropriate, enhancing the pedestrian and cycle network and, for major non-residential schemes, providing adequate changing, shower, storage and drying facilities for cyclists

5.1.4 The same policy expects the following issues to be addressed and resolved satisfactorily:

- **In accordance with the standards set out in the parking schedule at Appendix 2, development proposals will be expected to:**

  i. Provide an appropriate level of safe, secure, accessible and usable parking provision having regard to the parking standards, the parking management regime and the level of accessibility by walking, cycling and public transport; and

  ii. Provide appropriate servicing and loading facilities.

- **Proposals for parking, servicing and loading should make effective and efficient use of land and be integral to the design of the development.**

5.1.5 At the present time, TDM have a number of concerns with the development and how the different uses and areas on site will successfully interact in order to fulfil the above policy criteria. Consequently, it will be necessary to insist that a number of planning conditions are applied and discharged before development can commence on site. These matters are addressed below with regard to the following key matters.

- **Pedestrian, Cycle and disabled access and permeability**
- **Secure cycle parking**
- **Travel Planning**
- **Event Management**
- **Access Requirements**
- **Non-arena uses (15/06070/P) – requirements and phasing**
- **Site Management and Maintenance**
- **Construction Management**
- **Illumination of Arena Façade from Bath Road**

5.1.6 TDM requires that the effective delivery of the above measures / processes is secured by condition through the planning process. It is however recognised that a number of the above matters will be subject to ongoing processes and therefore it is essential that future agreement / discussions take place in a timely manner to ensure implementation form the first occupation of the site.

5.2 Pedestrian, Cycle and disabled access and permeability

5.2.1 Referred to earlier is the need to create effective linkages into and through the site for non-motorised users from all directions. The earlier condition requires that the development is accompanied by an extensive revisiting and upgrading of current signage from surrounding areas along with improvements to the pedestrian environment.

5.2.2 However, within the site itself, it is necessary to ensure that high quality infrastructure enables and actively encourages pedestrian / cycle movement through the site during all times of the day in line with the above policies. TDM has made it clear that it will be unacceptable for such a route to be closed and / or cyclists to dismount in order to travel through the site during non-event days. TDM has therefore raised concerns regarding the validity and maintenance of the proposed lift, the responsibility for which will fall outside of the remit of the arena operator. At the time of writing it is understood that a ramp facility is currently being investigated by the arena project team.

5.2.3 The final masterplan shall therefore enable a continuous cycle route to be developed between Bath Road and the main Arena bridge and the St Philip's footbridge whilst enabling further linkage to any future bridge linking to the former Post Office site.

5.2.4 The above requires the following requirements to be addressed to the satisfaction of TDM prior to occupation, some of which is referenced earlier in **4.1.13.**

- **The implementation of a continuous cycle linkage between Bath Road and Cattle Market Road / Riverside Walkway and the submission of and the entering into of any formal structural agreements (as necessary) to ensure a safe and maintainable route across the site.**

5.2.5 However, it is at present unclear how the non-arena uses will be accessible from the main plaza, in particular the area surrounding the eastern amphitheatre in view of the levels shown on the masterplan. This will require further consideration as part of a further submission of detailed drawings and phasing of the non-arena uses. As a result, there is a linkage between this provision and ultimately the success of the non-arena uses.

5.3 Secure cycle parking

5.3.1 The submitted masterplan shows two areas of cycle parking to serve the arena uses. In total this amounts to 252 and comprises 232 spaces on the edge of the site to the north east of the Arena and a further 20 spaces for staff within the restricted access area (for staff only).

5.3.2 TDM have numerous problems with the location and amount of suggested cycle parking provision for staff and visitors and this has been referred to the arena team for further consideration. At the time of writing, the following matters are outstanding and require to be addressed to the satisfaction of TDM officers:

- **Cycle parking is located remotely (having previously been located closer to the centre of the plaza in earlier masterplans). This has therefore removed a beneficial opportunity to deliver a landmark and attractive cycle parking facility that reflects Bristol's status as a cycling city.**

- **As a result of the above, the remote location and fairly mundane design sets a poor example and effectively relegates the location and therefore status of cycling on this site. This is not acceptable and TDM consider that this fails to reflect the wider policy aspirations of the city.**

- **In addition to the above, the provision of just 20 staff cycle parking spaces in an exposed location (against the arena wall alongside the access road) is clearly unacceptable, and would only cater for a cycle modal share of 5% amongst 400 staff. This is not acceptable.**

- **At the time of writing, TDM await improvement of the above situation in terms of the design and location of cycle parking, but also the indication on a plan of where further cycle parking could be located in the event that the 252 spaces provided are insufficient. This is a standard requirement of any development.**

5.3.3 Until the above is demonstrated to the satisfaction of TDM, a condition is required to ensure this is revisited prior to construction of the site. A comparison of cycle parking at other arenas is considered irrelevant in the case of Bristol given the volume of cycling movements in Bristol which are greater than the combined cycle trips occurring in Birmingham, Manchester and Liverpool.

5.4 Travel Planning

5.4.1 Having reviewed the Framework Travel and Event Management Plan, very little information is provided in terms of the infrastructure and incentives that will be offered to staff as part of the arena and the non-arena uses. TDM therefore require a condition for a site-wide Visitor and Staff Travel Plan to confirm the full itinerary of measures to ensure that sustainable transport is maximised in line with the following requirements:

- **Prior to construction of phase one and phase two, the applicant is required to submit a Staff and Visitor and Residential Travel Plan (where applicable), detailing the following:**

- **The appointment of and funding of a Travel Plan Coordinator to be appointed and to become part of the TQEZ Area Travel Plan Group. The TPC will be responsible for the management and maintenance of the travel plan, including the relationship with the local planning authority and/or other key stakeholders**

- **A timetable for the preparation, implementation, monitoring and review of all stages of the travel plan.**

- **The overall outcomes to be achieved by the travel plan; the performance indicators, targets and back-up measures to be applied where the travel plan is not meeting its targets and the process for the monitoring and review of targets and measures**

- **Confirmation of the measures and obligations to be implemented upon occupation to include the following:**

    - **Secure cycle parking for visitors, staff and residents where applicable, and showers and lockers for staff, with areas identified for additional provision in the event that the former are found to be inadequate at a later date;**

    - **The provision of car club vehicles to serve residents within the phase two development;**

    - **Information strategy – to be distributed to staff from the first occupation providing travel information, bus/rail routes and timetables, car-share database links and useful contacts;**

    - **Issuing of cycle equipment and discounts for cycle equipment for staff within the development;**

    - **A strategy for the incentivisation of rail, park and ride and bus use for both staff and visitors to the site to be submitted and agreed;**

    - **As part of the Arena development, the installation of a large live real-time public transport information screen within a prominent and location within the arena to be clearly visible to crowds, the design of which is to be submitted and agreed in advance of implementation;**

    - **Inclusion of sustainable travel information within sales literature and websites associated with the developer / end occupiers;**

    - **Evidence of how regular liaison between the TPC and other groups will be undertaken / carried out, including public transport operators, cycle user groups and BCC Strategic Transport as part of an annual requirement to monitor the travel habits of all users;**

    - **An Arena Travel Survey to be undertaken at a major event (to be agreed with BCC) within six months of occupation and annually**

thereafter;

- **For the non-arena uses, a Travel Survey to be undertaken within six months of first occupation (or other such time as agreed with BCC);**
- **The above measures will be required over a five-year period following occupation and a budget will need to be set aside by the developer to undertake these requirements;**
- **Any sanctions where the targets and indicators are not being met are to be included, and how and when they should be applied a list of actions on what would happen in the event that the car mode share or total number of cars used - identified through monitoring - exceeds the target figure. These could include but should not be limited to:**
    1. **investment in further incentives to encourage the use of sustainable transport**
    2. **enhanced parking controls and management**
    3. **contributions towards other measures such as cycling facilities and infrastructure within the development**

- **The above measures are not considered to be exhaustive and should be enhanced and increased subject to further discussions between the arena project team and Strategic City Transport.**

5.5 Event Management Plan

5.5.1 The submitted Framework Travel and Event Management Plan (TEMP) proposes a number of requirements and access controls which have been formulated by the Arena Project Team in conjunction with the arena operator in order to minimise negative impacts occurring both on and off-site. As the site will be subject to differing uses at different times of the week and day (according to what events and construction are taking place), it will be essential that the TEMP represents an evolving process that is able to change in order to suit circumstances at any moment in time. The TEMP will need to be devised and progressed with full involvement from key stakeholders, as detailed in the next section.

5.5.2 The TEMP provides further detailed information on the operation of the site on event and non-event days, although the key principles of the document are summarised below for the benefit of members of the planning committee.

- **Confirmation of likely number of events per annum:**
    - 10,000 spectators or more: 45 events
    - 8,000-9,999: 22 events
    - 5,000-7,999: 43 events
- **The implementation of specific TEMPs (rather than a single plan), which take account of the following:**
    - The capacity of the event in question
    - The type of audience (eg. family shows / OAPs)

- The occurrence of another major event at the same time (ie. football matches, Balloon Fiesta etc)
- Unexpected situations occurring as a result of abnormal influences (ie. roadworks, motorway closure, accidents etc)

- **The formulation of a Travel Plan Management and Stakeholder Groups to undertake specific event planning, to include representatives from (but not limited to):**
  - The Arena Operator, BCC Public Transport, Local resident / business groups, Cycling groups, Bus operators, GWR, Network Rail, Highways England, BCC Network Management, South Glos, North Somerset and B&NES councils, the emergency services and the appointed Traffic Management contractor

- **On-site Event Management to include:**
  - Safeguarding access to the arena for event-specific traffic and emergency vehicles
  - Ensuring access for pre-booked disabled parking, pre-booked VIP parking and proposed residential / employment uses
  - Prohibiting rogue / un-booked vehicles attempting to enter the site
  - Emergency procedures for safe evacuation
  - Restricting vehicle movements (other than for emergencies) at times with high crowd numbers
  - Crowd management to ensure the safe and efficient flow of pedestrians out of the venue.

- **Off-site Event Management Measures:**
  - Temporary closure to traffic of Cattle Market Road between Temple Gate and the Arena access bridge between 6pm and midnight for large evening events.
  - Temporary closure to traffic of Albert Road between Feeder Road and Stanhope Street between 6pm and midnight for large evening events to allow for safe boarding / alighting of coaches and taxis in dedicated bays.
  - Retention of private access to businesses and residents
  - The protection of large numbers of pedestrians from live traffic (eg Bath Road)
  - The management of coach, taxi and general drop-off / pick up movements, particularly along Albert Road, but also elsewhere, as appropriate.
  - Management of pedestrians between the site and Park and Ride boarding locations along Redcliffe Way.
  - Additional management of Park and Ride sites at Portway, Ashton Vale and Brislington, where applicable.
  - Crowd management at Temple Meads station

- The effective enforcement of parking restrictions within areas subject to evening / event-day parking controls.
- Liaison with BCC's traffic control centre to temporarily alter signals to allow emergency / VIP access to and from Bath Road access.
- The effective use of Variable Message Signage (VMS) in conjunction with BCC's Network Management team.

5.5.3 It is essential that the above management regime and responsibilities are agreed between the arena operator, BCC and the management and stakeholder groups as above to ensure a seamless and effective process. It will not be acceptable for any matter to not be considered and an effective remediation strategy adopted to deal with situations which are likely to arise outside of the arena operator's control. In the interests of avoiding repetition, the above matters should be subject to an effective and enforceable condition against non-compliance.

5.5.4 TDM understand that the area for which the arena operator will be responsible extends not much further than the footprint of the building. As a result, a significant amount of the management of crowds, vehicles, highway measures, diversions and other traffic management places a significant burden upon BCC and in particular the Highway Authority to successfully deliver. In view of this, the cost to the project should in no way underestimate the level of funding that will be required to successfully run such an operation, notwithstanding the additional congestion that will be generated on the highway network.

5.6 Access Requirements and Vehicle Swept Paths

5.6.1 A number of strict controls will be necessary to ensure the effective operation of arena island to serve events and occupiers of the non-arena uses. Notwithstanding the need to effectively manage traffic and pedestrians on and off site, it is considered helpful to briefly summarise the access proposals accompanying the planning application below, alongside TDM's comments on the submitted drawings in bold.

Articulated Vehicles & Tour Coaches (dwg no: 034070-BA-BHE-TP-ZZ-DR-00-0001)

5.6.2 Access via the HCA bridge and alongside the eastern side of the site to the rear of the building via a service dock providing space for four HGVs to load / unload at any one time. Access to the side / rear of the arena will be subject to a secure compound. Post-event, event traffic will be restricted from leaving the site until spectators have vacated the island. This has been tracked for a 16.5m articulated vehicle and a 15m long double-deck coach.

- **The turning swept path appears incredibly tight around the service yard, requiring a 180 degree turn before reversing into the loading bay. Whilst this may be achievable, TDM note that the parking of a further four HGV will reduce considerably the width of the service road and could have consequences for the ability to turn coaches and outside broadcast vehicles around the loading bay, forcing all of these vehicles to use the Bath Road 'emergency' access, which TDM will only accept for rare cases where VIPs require an immediate exit from the venue, given the poor visibility to Bath Road and the status of the 24-hour bus lane. This has been raised with the project team.**

Waste Vehicle (dwg no: 034070-BA-BHE-TP-ZZ-DR-00-0003)

5.6.3 The route shown is similar to that of the HGV although the vehicle shown is a 10m long 2-axle rigid HGV, undertaking a long reversing manoeuvre within the service yard and in front of any articulated vehicles that may be using the loading bay.

- **TDM question the above drawing, for similar reasons as above given the lengthy reversing movement that is required in order to reach the compactors that are shown to the rear of the arena. Subsequently, it is questioned why such manoeuvres cannot navigate the site in an anti-clockwise direction around the site, similar to that shown for the emergency vehicle in the drawing considered below.**

Emergency Vehicle (dwg no: 034070-BA-BHE-TP-ZZ-DR-00-0004)

5.6.4 In addition to the above route, emergency vehicles will be able to circumnavigate the site in an anti-clockwise direction, through the temporary VIP car park (latterly the phase two development) and continue underneath the pedestrian plaza to reach the service bay. Secondly, a direct access from and underneath Bath Road exists to allow such manoeuvres. This swept path is shown for a Fire Appliance.

- **In the interests of response times the above arrangements are considered acceptable subject to the use of sirens and blue-lights. In view of paragraph 5.7.2 above, it is queried whether HGVs could use the same anti-clockwise route around the site to avoid the conflict referred to above.**

5.7 Non-arena uses (15/06070/P) – impacts, requirements and phasing

5.7.1 Very little information is provided on the layout and likely access, servicing and movement patterns of the non-arena uses, other than the traffic generation. However, as an outline application, it is very difficult to be prescriptive about which plots may come forward, for which uses and at what time. As a result there is the need for a condition to be imposed to ensure that the phase two development is delivered in a sensible way that does not lead to mobility and/or access issues at a later date, either during or outside of arena event times.

5.7.2 For the purposes of understanding the traffic generation of the non-arena uses, this amounts to the following forecasted peak hour vehicle movements on the basis of the floorspaces / number of apartments proposed:

- **Weekday morning peak hour (8-9am) – 49 arrivals, 11 departures – 60 total**
- **Weekday evening peak hour (5-6pm) – 11 arrivals, 52 departures – 63 total**

5.7.3 TDM are not unduly concerned about the traffic impacts of the non-arena uses provided that low levels of parking are implemented on the phase two sites as is intended within the TA. Indeed, TDM currently seek a maximum parking standard for office uses in the TQEZ of 1 space per 600sqm (based on essential operational requirements and other local authority data). This is referred to in the Temple Quarter Sustainable Urban Mobility Plan (SUMP) which draws upon the Central Area Plan and seeks a reduction from the current maximum 1:200sqm for office uses in recognition of the limited highway capacity in the area whilst reflecting the investment in local public transport over the forthcoming years. However, this needs to be firmed up as in theory an application could be submitted which could

have a far greater trip generation than is being forecasted in the TA. The following conditions should therefore be imposed upon the outline application:

Future development occurring within the phase two land (Ref: 15/06070/P) should conform with the following maximum parking standards:

- **C3 Residential uses – 0.5 car parking spaces per unit, including visitors, electric charging points and disabled spaces.**
- **B1 Office uses – 1 car parking space per 600sqm to include electric charging points and minimum disabled parking standards.**
- **Other uses – minimal operational requirements, including disabled parking.**
- **All uses - Cycle parking to be provided in a secure and covered location in compliance with the minimum standards contained within the SA&DMP.**

5.7.4 The non-arena uses will have the potential to generate a considerable number of non-motorised trips, particularly from the A4, Temple Meads, Cattle Market Road and through the Post Office site in the event that this site is developed. That the phase two uses are considered (albeit vaguely) in the current submitted TA, this should not in any way absolve any future applicant from providing the following information to ensure the policy compliance of future developments on this site. It will not be acceptable for such developments to be submitted in a piecemeal and fragmented fashion as this commonly results in incoherent and irrational layouts which fail to fulfil accessibility requirements.

Prior to submission of any future Reserved Matters or Full Application for development on the phase two land, the following shall be submitted:

- **A detailed masterplan for the wider site, confirming parking, access and servicing of the entirety of the phase two development by all modes of transport;**
- **The submission of a Transport Statement, confirming:**
  - **the multi-modal trip generation of the proposed development**
  - **an assessment / audit of surrounding routes for non-motorised users**
  - **the parking provision for the development in question**
  - **How the development will avoid conflicts during times when the arena is operations.**
- **Consideration of the need for and delivery of a pedestrian / cyclist footbridge, linking the non-arena uses directly to Temple Meads station, in the context of the delivery of other sites which may enable such a link in the future.**

5.7.5 In the event that a greater level of movement is forecasted to be associated with the non-arena uses, TDM will seek that the impacts are quantified and that suitable off-site mitigation and accessibility requirements are considered and delivered.

5.8 Car Parking

5.8.1 The proposals identify two distinct parking areas within the site for phase one, with only the disabled parking remaining following the occupation of phase two by the non-arena uses.

5.8.2 A total of 200 car parking spaces are provided during phase one. These are intended to serve only VIP visitors and will be removed as and when phase two is developed. BCC have no minimum requirement for car parking for such venues, although if the maximum parking standard of 1 space per 15 seats was to be insisted upon, this would result in a requirement for 800 parking spaces on site.

TDM consider that to provide 800 permanent parking spaces on site would not only require a substantial permanent car park several storeys in height but would also preclude the delivery of non-arena uses. Secondly, and perhaps more importantly, such a facility would attract more traffic to the arena site than could be accommodated on the surrounding highway network, given the access constraints of the site and the acute and substantial impact this would have on the immediate area in terms of congestion, delay and safety impacts. As a result, it is considered that it would be contrary to the policy objectives of BCC in reducing car reliance and promoting sustainable transport to demand the maximum parking standard in view of the impacts described above.

5.8.3 A total of 45 accessible car parking spaces are provided on site and will remain on-site regardless of the phase two development, These are reserved for disabled visitors and will be available only through prior booking. In terms of the quantum of disabled parking, the standard quoted within the SA&DMP document requires 5% of parking capacity to be reserved for disabled people. However, given that the 200 spaces referred to above will be removed, it is arguable that 100% of parking on-site will eventually be for disabled users. A more sensible calculation would therefore be to assess the 5% requirement against the 800 space maximum local plan requirement. This would identify a requirement for 40 spaces, which the proposal exceeds by 5 spaces, which would also allow for an element of staff disabled parking. A provision of 45 spaces is therefore considered reasonable and is comparable with other arenas recently agreed elsewhere in the country.

Parking outside of arena events

5.8.4 The operation of the 200-space temporary car park and the 45-space accessible car park at times when events are not taking place has not been confirmed, although TDM highlight that the following matters would need to be addressed:

- **Policy** – BCC planning policy is to resist the delivery of additional commuter parking which would encourage a greater level of traffic to the city centre, contrary to the need to encourage the use of sustainable transport.

- **Operational** - It is unlikely that a public car park would be able to operate to its full extent between 7am and 7pm every weekday, given the likely demand for arena VIP parking as early as 3pm or 4pm on evening event days and the need to remove overstaying vehicles. Such fluctuations in availability may compromise the viability of a car park in this location given the number of events occurring at the arena, notwithstanding conferences, exhibitions and other daytime events which will require their own daytime visitor parking.

- **Traffic Regulation Orders -** The implementation of Traffic Regulation Orders will be required to allow for penalty charge notices for illegitimate parking (ie. in disabled bays) and other charges to be made for parking on non-event days.

- **Materials -** The car park layout surface materials will need to ensure that individual parking bays are marked out and directional arrows can be installed. This may be achieved by access lanes being in tarmac and parking bays in a SUD material (fine gravel). This is at variance with the surface materials that are proposed for the temporary car park.

- **Layout -** The proposed layout of the temporary car park would need to be altered to remove the cul-de-sacs at the end of the parking rows as there is no ability for vehicles to escape if bays are full. It is arguable that a number of bays at the end of the parking rows are usable as a result of the angle where they meet with the northern boundary of the site.

- **Infrastructure -**The installation of any infrastructure (pay machines / lighting / signage / CCTV etc) will require to be considered.

5.9 Site Management and Maintenance

5.9.1 It is the highway authority's understanding and expectation that the only areas of the site to be adopted as public highway are the access road bridge and the first 30-40 metres of the access road into the site, including a turning head to ensure that vehicles entering the site by error are able to turn around and exit onto the highway network. This is a standard requirement on developments whose main circulation movement areas are to be privately owned and maintained.

5.9.2 Notwithstanding the above, it is clear that aside from the area of the site that is to be managed by the arena operator, this results in a substantial area of public realm that will fall under the management and ownership of Bristol City Council. At the present time, TDM is unclear whether the arena project has adequately considered the following site management matters:

- **Formal confirmation of the areas falling within the ownership / liability of the arena operator, BCC Highways or other council departments;**

- **Ownership and maintenance liabilities and associated costs;**

- **The need for an agreed maintenance and operational plan;**

- **H&S risk assessments arrangements and liabilities on event and non-event days;**

- **Confirmation of the proposed parking regime on event days and non-event days (as above);**

5.9.3 TDM require that a condition is attached to address the above matters prior to construction, given that BCC Highways will need to take an active role in the design of certain areas of the site if it will be expected to manage certain areas of the site, regardless of whether such areas fall within the highway adoption area.

5.10 Construction Management

5.10.1 The impacts arising during the construction of the development are likely to be considerable and could generate unacceptable environmental conditions in the event that these are not sufficiently controlled and monitored. A condition will be required to ensure that the arena contractor will take all measures necessary to ensure that the negative impacts of construction are minimised in the interests of the environmental quality of the local area.

- **No development shall commence unless a Construction Environmental Management Plan has been submitted to and approved in writing by the Local Planning Authority. The works shall be carried out strictly in accordance with the approved plan. The plan shall include (as a minimum):**
  - **Construction vehicle movements;**
  - **Construction operation hours;**
  - **Construction vehicular routes to and from site;**
  - **Construction delivery hours;**
  - **Expected number of construction vehicles per day;**
  - **Car parking for contractors;**
  - **Specific measures to be adopted to mitigate construction impacts in pursuance of the Environmental Code of Construction Practice;**
  - **A scheme to encourage the use of Public Transport amongst contactors;**
  - **Measures to avoid congestion impacting upon the Local Highways.**

5.11 Illumination of arena building facade from Bath Road

5.11.1 Motorist distraction is a key concern of the highway authority, particularly with regard to illuminated displays and adverts. A number of recent appeal decisions have supported this view in relation to digital adverts which have been proposed close to Temple Gate and Old Market roundabout.

5.11.2 The degree to which the arena building would be prominent and visible to Bath Road is therefore a concern to TDM. Under no circumstances will it be acceptable to the highway authority for images or lighting to be positioned on the façade of the building that would give rise to unacceptable highway safety issues. This will be required to be subject to the following condition:

- **No advertisement or images shall be sited or displayed so as to:-**
  - **endanger persons using any highway, railway, waterway, dock or harbour**
  - **obscure, or hinder the ready interpretation of any traffic sign, railway signal or aid to navigation by water or air; or**
  - **hinder the operation of any device used for the purpose of security or**

surveillance or for measuring the speed of any vehicle.

- **Any advertisement displayed, and any site used for the display of advertisements, shall be maintained in a condition that does not impair the visual amenity of the site.**

- **Any structure or hoarding erected or used principally for the purpose of displaying advertisements shall be maintained in a condition that does not endanger the public.**

- **Where an advertisement is required under these Regulations to be removed, the site shall be left in a condition that does not endanger the public or impair visual amenity.**

BRISTOL ARENA | January 2016 Planning | View from Plaza to Arena (Artist's Impression)

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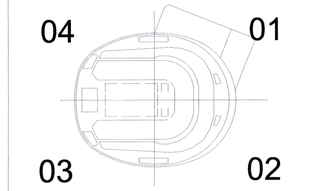
1 Illustrative Master Plan Phase 1
1 : 500

REVISIONS		
NO.	DATE	DESCRIPTION
01	15.10.15	ISSUED FOR PLANNING
02	12.11.15	REISSUED FOR PLANNING
03	17.11.15	REISSUED FOR PLANNING
04	18.11.15	REISSUED FOR PLANNING
05	15.01.16	REISSUED FOR PLANNING
06	29.01.16	REISSUED FOR PLANNING



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PROJECT
BRISTOL ARENA

CLIENT
BRISTOL CITY COUNCIL

DRAWING TITLE
ILLUSTRATIVE MASTER PLAN PHASE 1

STATUS	PROJECT NO.
PLANNING	4699

DRAWING NUMBER: POP - AR - SP - XX - XX - XXX - 0725 — ISSUE: 06
(OWNER | AGENT | TYPE | LEVEL | ZONE | CONTENT | NUMBER | ISSUE)

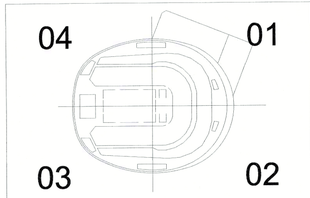
DATE	SCALE @ A1	SIZE	NORTH
29.01.2016	1 : 500	A1	

ORIGINAL IS A0

DRAWN BY	CHECKED	APPROVED	NOTES
CL	RB	TJ	USE FIGURED DIMENSIONS IN PREFERENCE TO SCALED. CHECK ALL DIMENSIONS ON SITE BEFORE FABRICATION OR SETTING OUT.

1 Illustrative Master Plan Phase 2
1 : 500

REVISIONS		
NO.	DATE	DESCRIPTION
01	15.10.15	ISSUED FOR PLANNING
02	12.11.15	REISSUED FOR PLANNING
03	17.11.15	REISSUED FOR PLANNING
04	18.11.15	REISSUED FOR PLANNING
05	15.01.16	REISSUED FOR PLANNING
06	29.01.16	REISSUED FOR PLANNING



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DRAWING TITLE
ILLUSTRATIVE MASTER PLAN PHASE 2

STATUS	PROJECT NO.
PLANNING	4699

DRAWING NUMBER: POP - AR - SP - XX - XX - XXX - 0726 | ISSUE: 06
(OWNER | AGENT | TYPE | LEVEL | ZONE | CONTENT | NUMBER | ISSUE)

DATE	SCALE @ A1	SIZE	NORTH
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DRAWN BY	CHECKED	APPROVED	NOTES
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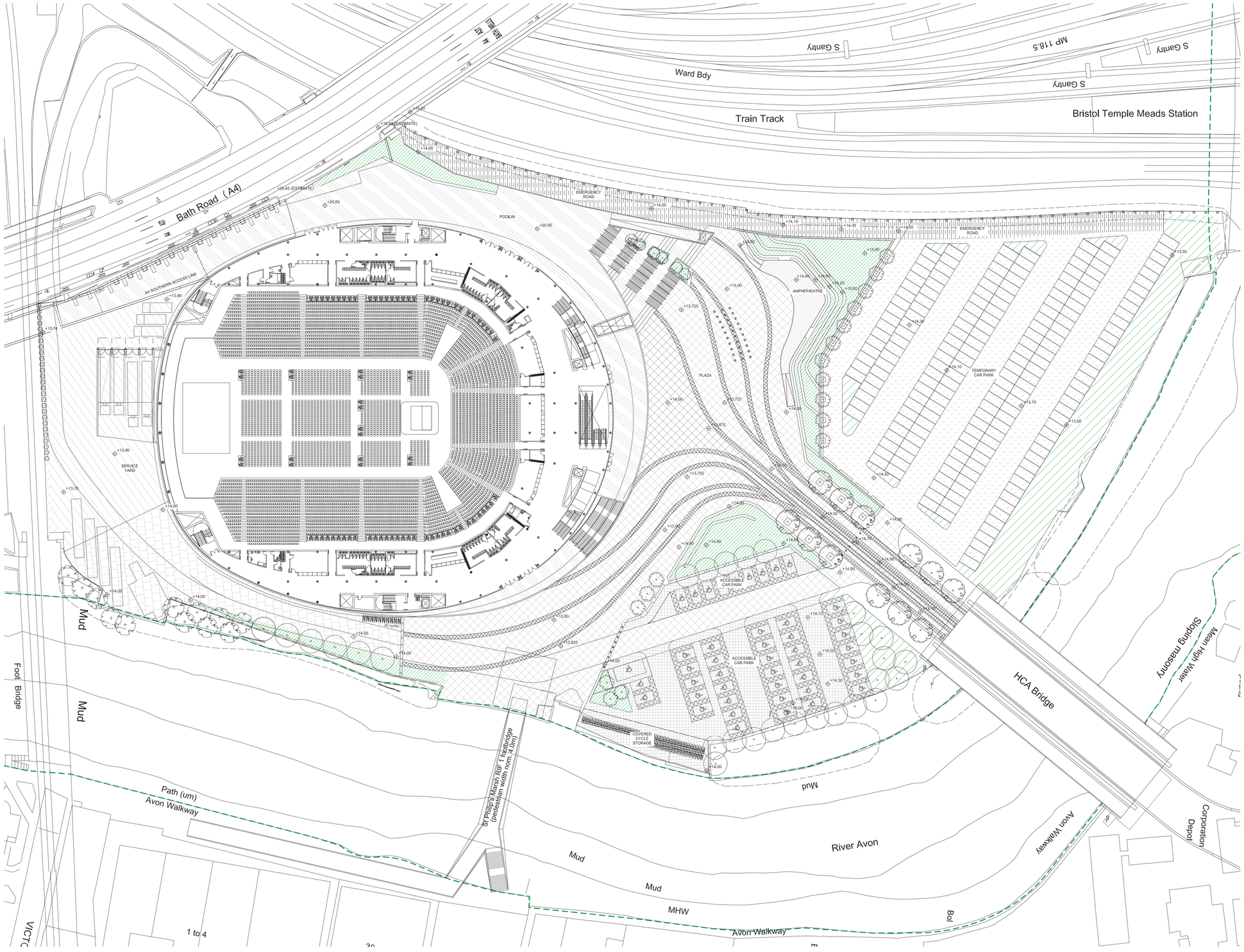
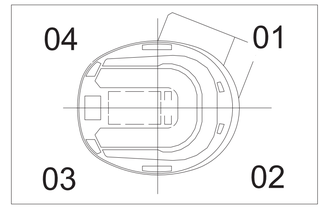


1 Landscape Master Plan
1 : 500

REVISIONS		
NO.	DATE	DESCRIPTION
01	15.10.15	ISSUED FOR PLANNING
02	12.11.15	REISSUED FOR PLANNING
03	17.11.15	REISSUED FOR PLANNING
04	18.01.15	REISSUED FOR PLANNING
05	15.01.16	REISSUED FOR PLANNING
06	29.01.16	REISSUED FOR PLANNING



KEY

- Site of Nature Conservation Interest (SNCI) Boundry
- Security bench
- Train track
- Retractable bollard
- Accessible car park space
- Car park space
- Gate/Fence
- Dark grey in situ concrete
- Medium dark grey in situ concrete
- Heavy duty concrete block
- Compacted gravel
- Heavy duty concrete
- Permeable block paving charcoal
- Permeable concrete block
- Timber decking
- In situ concrete
- Block paving dark grey
- Soft landscape
- Existing trees boundary
- Water feature

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PROJECT
BRISTOL ARENA

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BRISTOL CITY COUNCIL

DRAWING TITLE
PROPOSED LANDSCAPE PLAN

STATUS
PLANNING

PROJECT NO.
4699

DRAWING NUMBER
POP- AR- SP- XX - XX- XXX - 0720

ISSUE
06

OWNER | AGENT | TYPE | LEVEL | ZONE | CONTENT | NUMBER | ISSUE

DATE
29.01.2016

SCALE @ A1
1:500

SIZE
A1

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NORTH

DRAWN BY
PX

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RB

APPROVED
TJ

NOTES
USE FIGURED DIMENSIONS IN PREFERENCE TO SCALED. CHECK ALL DIMENSIONS ON SITE BEFORE FABRICATION OR SETTING OUT.