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Carpark Extension at Barnsley Metrodome Leisure Complex

Transport Statement

On behalf of

Barnsley Premier Leisure

BIM: BMCE-BSP-ZZ-XX-RP-D-001-P1

Project: 19-0012

Date: June 2019

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Contents

1	INTRODUCTION.....	1
1.1	Background.....	1
1.2	Scope of Transport Statement.....	1
2	EXISTING CONDITIONS.....	2
2.1	Existing Land Uses.....	2
2.2	Site Location and Surrounding Area.....	2
2.3	Sustainable Transport Facilities.....	4
2.4	Walking.....	4
2.5	Cycling.....	6
2.6	Public Transport.....	8
3	SITE LAYOUT.....	10
3.1	The Scheme.....	10
3.2	Access Arrangements.....	10
4	PARKING PROVISION.....	12
4.1	Car Parking Provision.....	12
4.2	Cycle Parking Provision	12
5	TRAFFIC GENERATION.....	13
6	HIGHWAY SAFETY ASSESSMENT.....	14
7	CONCLUSIONS.....	16

Appendix A Proposed Site Layout

1 Introduction

1.1 Background

1.1.1 This Transport Statement (TS) has been prepared by BSP Consulting on behalf of Barnsley Premier Leisure, in relation to a proposed carpark extension at Barnsley Metrodome Leisure Complex.

1.1.2 Current proposals are for the existing car park at Barnsley Metrodome Leisure Complex to be extended to include an additional 96 car parking spaces.

1.1.3 The purpose of this document is to inform Highways Development Control Officers at Barnsley Metropolitan Borough Council with respect to all highways, traffic and transportation matters associated with the development proposals.

1.2 Scope of Transport Statement

1.2.1 Following this introduction, the TS will include the following Chapters:

- Chapter 2 describes the baseline situation with reference to the development site's location, the highway network and sustainable travel facilities available in its proximity.
- Chapter 3 details the development proposals including site layout and site access arrangements.
- Chapter 4 assesses the existing and proposed car and cycle parking provision.
- Chapter 5 considers the trip generation of the site.
- Chapter 6 assesses highway safety and provides details of the accident data in the vicinity of the site for the last 5 years.
- Chapter 7 summarises and concludes the TS.

2 Existing Conditions

2.1 Existing Land Uses

2.1.1 Barnsley Metrodome Leisure Complex is currently operational as a multifunctional venue, offering a wide range of leisure activities, including swimming and aquatic activities, bowling, café and lounge area, and hosting parties and celebrations.

2.1.2 At present, there is vehicular access to the site via Queens Road. This leads to car parking areas within the site.

2.2 Site Location and Surrounding Area

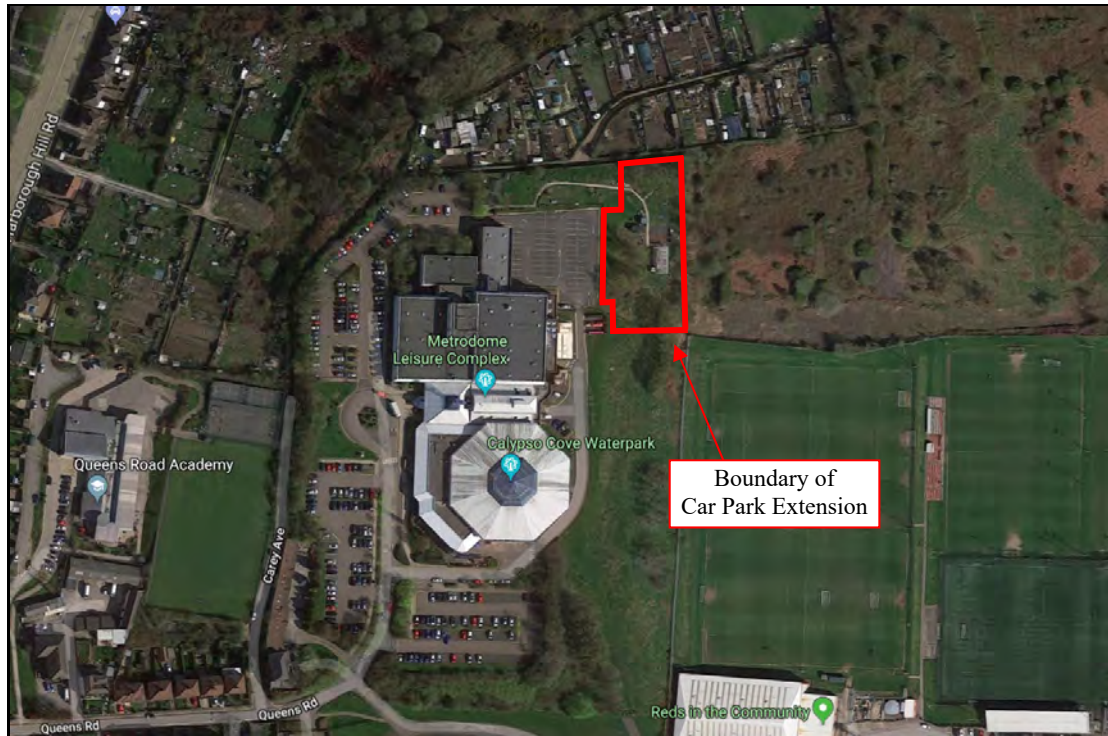
2.2.1 The site is located in Barnsley, which is a town in South Yorkshire, located halfway between Leeds and Sheffield. The site is located to the east of Barnsley town centre, as shown in Figure 1 below. Barnsley has a population of approximately 92000 people, and the site is well located to be accessible for the residential areas of Barnsley.

Figure 1: Site Location Plan



2.2.2 Figure 2 below gives an indication of the site layout, and shows the existing car parking areas around the south, west and north of the site. The red boundary in Figure 2 shows the extent of the proposed car parking area, which currently consists of open land.

Figure 2: Indicative Boundary of Car Park Extension



2.3 Sustainable Transport Facilities

- 2.3.1 Access to sustainable modes of transport is important in reducing reliance on the private car. The following sections of the TS establish the sustainable travel facilities in the vicinity of the site, which will enable people to choose how they travel to and from the site.

2.4 Walking

- 2.4.1 Typically, a distance of 2.0km would be considered as a threshold distance below which a sustainable approach to transport planning would seek to replace car trips for walking trips. Figure 3 below shows the area within 2.0km of the site. The site is located within the urban town of Barnsley, and a large residential population is situated within a reasonable walking distance of the site. Additionally, there are a range of public transport connections available from within a short walking distance of the site, discussed further in section 2.6 below.

Figure 3: Indicative 2.0km Walking Routes from the Site



- 2.4.2 Pedestrian access to the site is currently available via Queens Road, leading to footways and crossings within the site. This arrangement will remain the same following the proposed development. The footways entering the site on Queens Road, and the footways and crossings within the site are shown on Figures 4 and 5 overleaf respectively.

Figure 4: Footways on Queens Road, approaching site



Figure 5: Footways and Crossings on Queens Road within site



2.4.3 A network of footways within Barnsley will allow pedestrian trips from the site to Barnsley town centre and public transport connections. The site is therefore considered to be highly accessible via this mode of transport.

2.5 Cycling

2.5.1 Cycling is a very cheap and fast option for accessing amenities at short to medium distances. Typically, a distance of 8.0km is considered a reasonable threshold below which people would consider cycling. Figure 6 below shows the areas within this cycling distance of the site.

Figure 6: Indicative 8.0km Cycling Routes from the Site



2.5.2 Figure 6 shows that the urban area of Barnsley is all within a reasonable cycling distance of the site, as are a number of smaller towns and villages, including Tankersley and Wombwell.

2.5.3 National Cycle Network (NCN) route 67 would be an attractive option for cyclists travelling to and from the site. Figure 7 overleaf shows that this is predominantly an off road route, which terminates close to the site. Figure 8 overleaf shows some of the cycle signage along the route on the A628.

Figure 7: Local Cycle Routes in Relation to Site

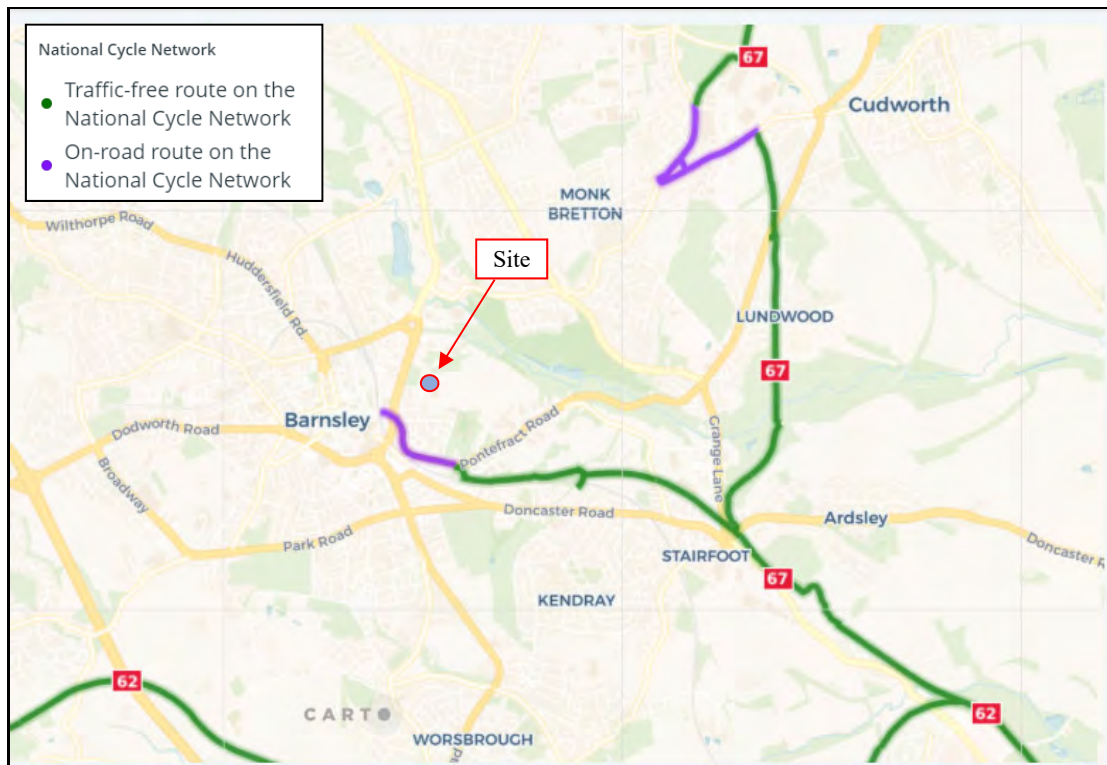


Figure 8: Cycle Signage on A628 Pontefract Road



2.5.4 In light of the above, the site is considered to be accessible by cycling.

2.6 Public Transport

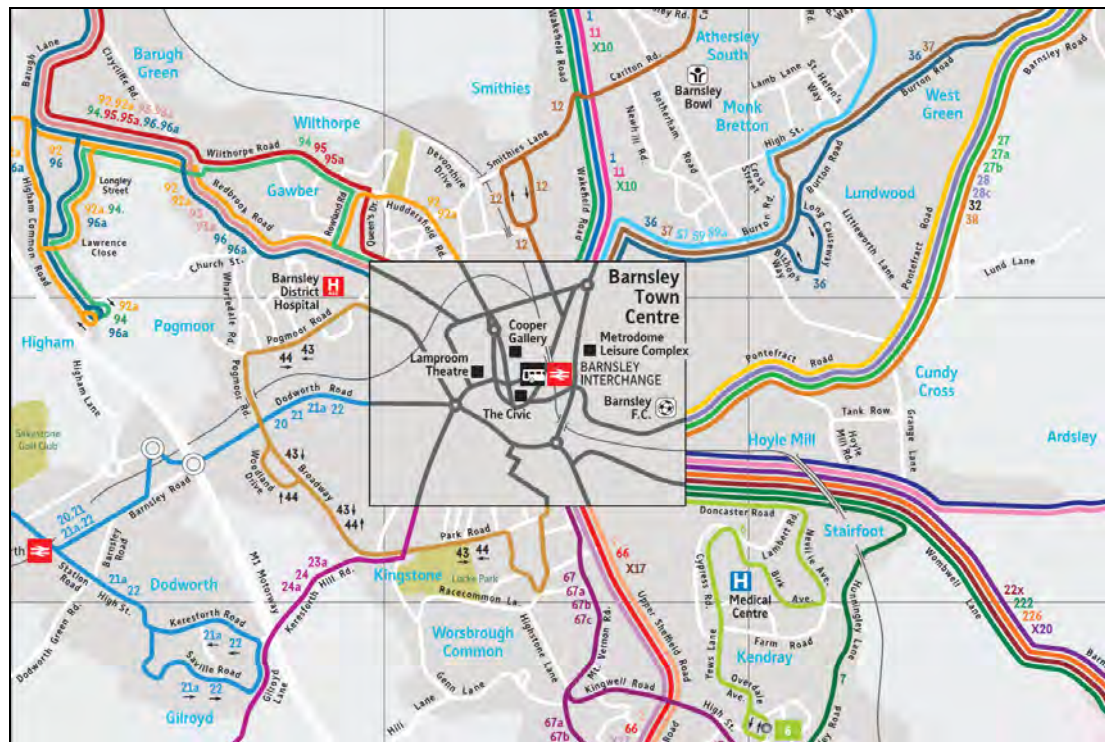
2.6.1 The site is well located for easy access to public transport services. Bus and train services are available from Barnsley Interchange, which is located approximately 400metres west of the site, as shown in Figure 9 below.

Figure 9: Location of Bus Stops and Railway Station (Barnsley Interchange)




2.6.2 Barnsley Interchange would allow visitors to access the site using a wide range of bus services, providing a frequent connection with a wide range of surrounding residential areas. The bus services available from Barnsley Interchange are shown in Figure 10 below.

Figure 10: Barnsley Bus Routes



2.6.3 Rail services also operate frequently through Barnsley Interchange. There are hourly services provided by a number of National Rail operators. The train lines, operators, and immediately connecting stations are summarised in Figure 11 below.

Figure 11: Summary of Train Services at Barnsley Interchange

Preceding station	 National Rail	Following station
Wombwell	Northern Hallam Line	Darton
	Northern Penistone Line	Dodworth
Meadowhall	Northern Leeds-Nottingham	Wakefield Kirkgate
	Northern Leeds-Lincoln	
Future Services		
Meadowhall	Northern Connect Leeds - Lincoln	Wakefield Kirkgate

2.6.4 Given the proximity of the site to both bus and train services, the frequency of services and the range of potential destinations, it is expected that a high number of trips to and from the site will be made using public transport.

3 Site Layout

3.1 The Scheme

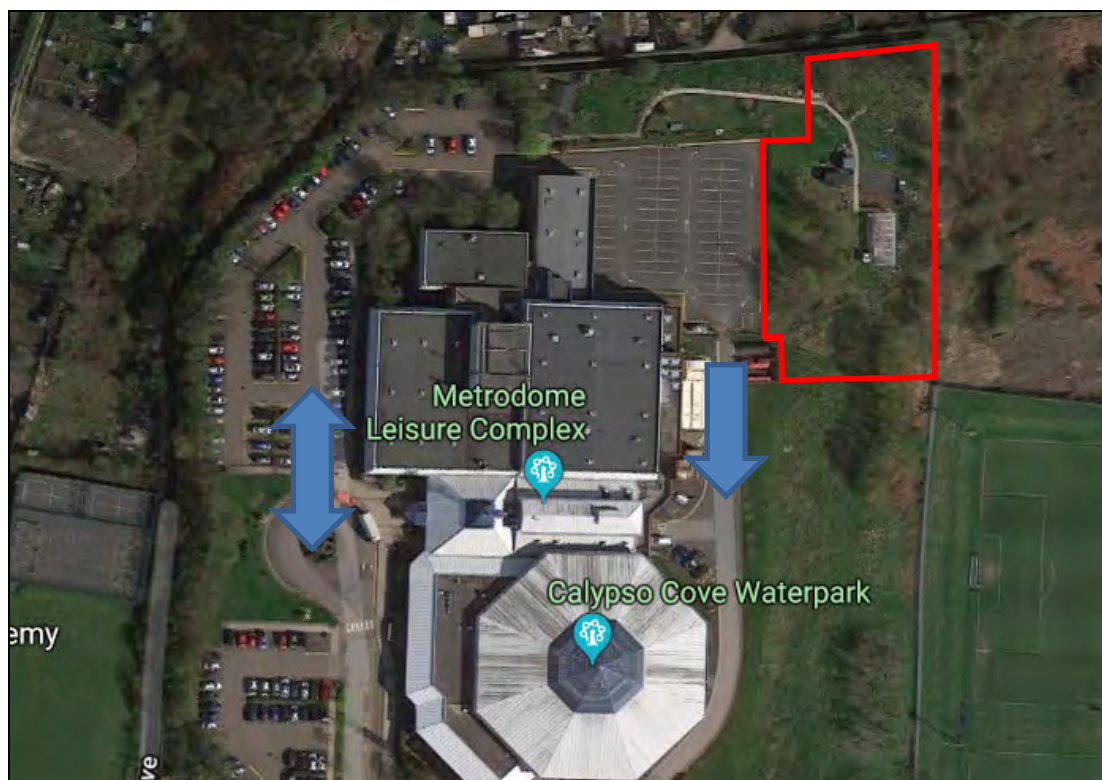
3.1.1 Barnsley Metrodome Leisure Complex is currently operational as a multifunctional venue, offering a wide range of leisure activities, including swimming and aquatic activities, bowling, café and lounge area, and hosting parties and celebrations.

3.1.2 The site has car parking areas to the south, west and north of the leisure facilities. Current proposals are for the northern car park to be extended from 76 spaces at present, to include an additional 96 car parking spaces, bringing the total number of car parking spaces in the northern car park to 172. The proposed development area is shown in Figure 12 below, and the proposed arrangement of the car park extension is shown in Appendix A. Pedestrian crossings and a new crossing are included in the site layout to enhance safety and pedestrian accessibility.

3.2 Site Access

3.2.1 At present, vehicles can use the western access road to enter and depart the northern area of the car park, but the eastern access road can only be used to depart the northern parking area. This is shown indicatively by the blue arrows in Figure 12 below.

Figure 12: Indicative Boundary of Car Park Extension



3.2.2 The existing points of entrance and departure are shown in Figures 13 and 14 below.

Figure 13: Existing Western Point of Access and Egress



Figure 14: Existing Eastern Point of Egress



3.2.3 As shown in Appendix A, the new car parking area will connect to the existing parking area, via a single entrance / departure point, leading to a one way loop within the new car park area.

4 Parking Provision

4.1 Car Parking Provision

4.1.1 It is important that the level of car parking provided at any facility is appropriate so as not to adversely encourage car use, whilst being sufficient to prevent the need for undesirable on-street parking.

4.1.2 At present, the parking provision on the site is proving inadequate for the needs of the facility. In addition to the regular activities taking place at The Metrodome, such as swimming or bowling, the facility hosts a number of one-off events, such as;

- Birthday Parties
- Christenings
- Anniversary Parties
- Graduations / Proms
- Leaving Dos
- Special Events

4.1.3 For any of these events, the venue can cater for up to 200 guests. Although the site is accessible via sustainable transport, as identified in section 2, at present well attended events are resulting in an overflow of car parking, leading to on-street parking. The need for additional car parking has therefore been identified at the site.

4.1.4 The number of car parking spaces in the northern car park will be increased from 76 to 172, which is an increase of 96 spaces. This is considered appropriate to address the current car parking shortfall.

4.2 Cycle Parking Provision

4.2.1 Given the location of the site, it is anticipated that a number of trips to and from the site could be made by cycling, as discussed in section 2.5.

4.2.2 Additional cycle parking spaces are therefore also recommended, to encourage cycle use and ease the demand for car parking spaces.

5 Traffic Generation

- 5.1 At present the site is used for general leisure activities, such as swimming and bowling, while also hosting additional events such as parties and celebrations.
- 5.2 The scale and nature of the facilities and site uses will not change as part of the current development proposals.
- 5.3 The proposed increase in car parking spaces is not intended to increase the traffic generation of the site, but instead improve the operation of the site by catering for the number of vehicles currently visiting the site.
- 5.4 In light of the above, no further investigation is considered necessary with regard to traffic generation.

6 Highway Safety Assessment

6.1 An investigation has been carried out into highway safety in the vicinity of the proposed development. Figure 15 below shows the accidents that have occurred during the 5 year period from 2014 to 2018.

Figure 15: Accident Plots (2014 – 2018)



6.2 A total of 19 accidents occurred in the study area shown in Figure 15, during a 5 year period. It is noted however that none of the accidents occurred on Queens Road or in the immediate vicinity of the site access. The accidents shown in Figure 15 are categorised in Table 1 overleaf.

Table 1: Accident Summary (2014 – 2018)

Accident No.	Severity	Date	Details
1	Slight	3 rd January 2014	2 vehicles and 1 casualty
2	Slight	4 th February 2014	2 vehicles and 2 casualties
3	Serious	21 st October 2014	1 vehicle and 1 casualty
4	Slight	29 th March 2015	2 vehicles and 1 casualty
5	Serious	8 th November 2015	1 vehicle and 1 casualty
6	Slight	7 th January 2016	2 vehicles and 1 casualty
7	Slight	5 th April 2016	2 vehicles and 1 casualty
8	Slight	12 th May 2016	2 vehicles and 1 casualty
9	Slight	26 th June 2016	2 vehicles and 1 casualty
10	Slight	10 th July 2016	2 vehicles and 2 casualties
11	Serious	20 th August 2016	1 vehicle and 1 casualty
12	Slight	30 th September 2016	2 vehicles and 1 casualty
13	Slight	26 th November 2016	2 vehicles and 1 casualty
14	Slight	21 st January 2017	1 vehicle and 1 casualty
15	Slight	3 rd March 2017	2 vehicles and 2 casualties
16	Slight	21 st March 2017	1 vehicle and 1 casualty
17	Slight	27 th April 2017	1 vehicle and 1 casualty
18	Serious	21 st June 2017	2 vehicles and 1 casualty
19	Serious	15 th June 2018	1 vehicle and 1 casualty

6.3 Table 1 shows that fourteen of the accidents recorded were classed as slight, five were classed as serious, and none were classed as fatal.

6.4 Overall, the number of accidents and the severity of accidents do not indicate cause for concern with regard to highway safety. As discussed in section 5, the development proposals will not result in an increase in traffic generation but will reduce on-street parking and improve the operation of the site. The proposals are therefore expected to improve highway safety.

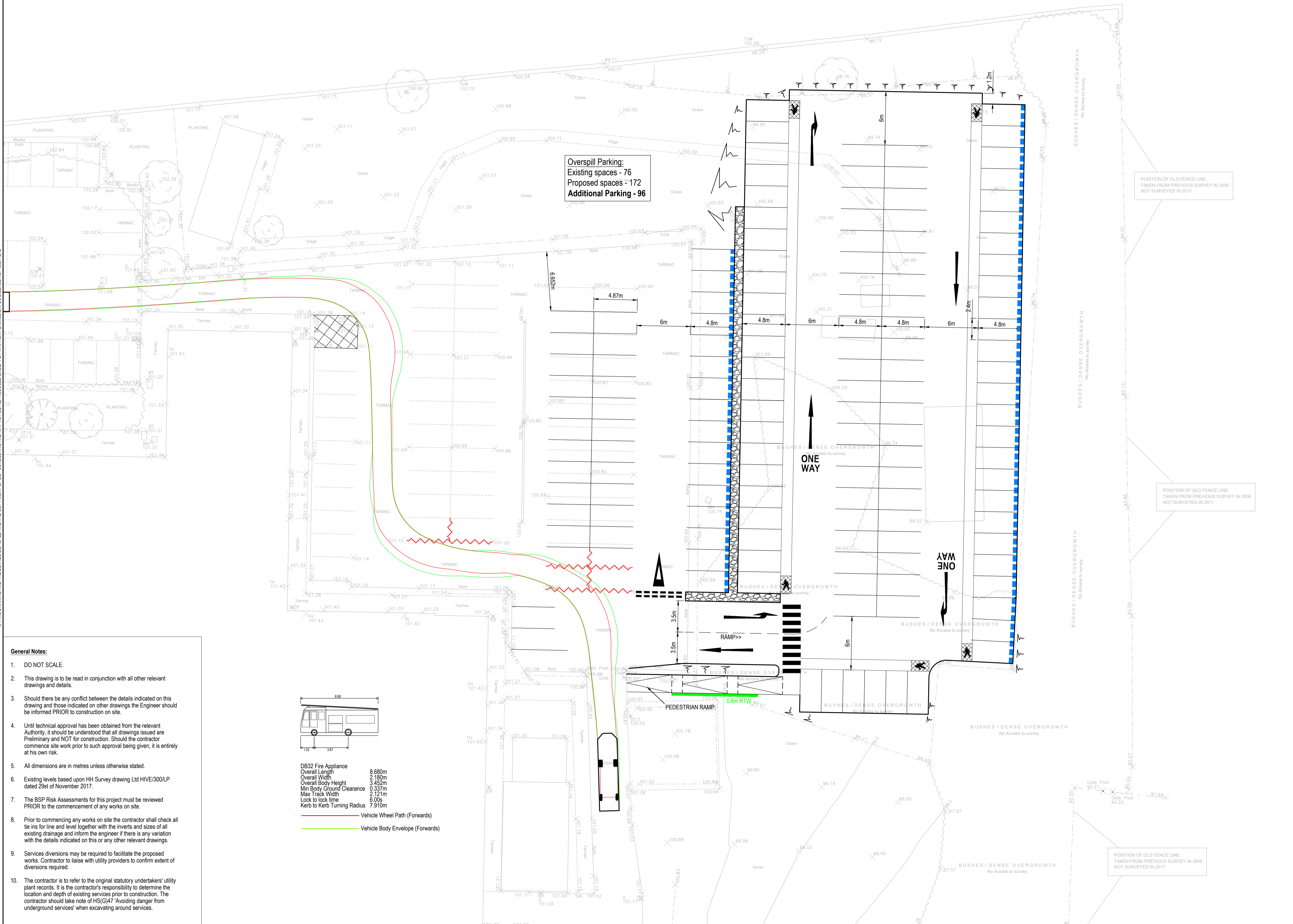
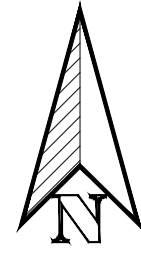
6.5 In light of the above, the proposed development is considered acceptable in highway safety terms.

7 Conclusions

- 7.1 This Transport Statement was prepared by BSP Consulting on behalf of Barnsley Premier Leisure, in relation to a proposed carpark extension at Barnsley Metrodome Leisure Complex.
- 7.2 Barnsley Metrodome Leisure Complex is currently operational as a multifunctional venue, offering a wide range of leisure activities, including swimming and aquatic activities, bowling, café and lounge area, and hosting parties and celebrations. At present, the site has car parking areas to the south, west and north of the leisure facilities. Current proposals are for the northern car park to be extended to include an additional 96 car parking spaces.
- 7.3 At present, there is vehicular access to the site via Queens Road. This leads to car parking areas within the site. Vehicles can use the western access road to enter and depart the northern area of the car park, but the eastern access road can only be used to depart the northern parking area.
- 7.4 The site is considered to be in a sustainable location, highly accessible to pedestrians and cyclists, with the potential for easy access via public transport. The site is located within a reasonable walking or cycling distance of vast residential communities of Barnsley, and existing footways and cycleways connect to the site. The site is located approximately 400metres from Barnsley Interchange, which would allow visitors to access the site using a wide range of bus and train services, providing a frequent connection with a wide range of surrounding residential areas. A high number of arrivals and departures at the site can therefore be made via sustainable modes of travel, which is beneficial in reducing the number of car trips to the site, and reducing the demand for car parking.
- 7.5 Although the site is highly accessible by sustainable modes, at present, busy events are resulting in an overflow of car parking, leading to on-street parking, and the need for additional car parking has therefore been identified at the site. Additional cycle parking spaces are also recommended, to encourage cycle use and ease the demand for car parking spaces.
- 7.6 The purpose of the additional parking is to cater for the level of vehicles currently visiting the site, and will not result in an increase in trip generation. The proposed addition of 96 spaces is considered appropriate in this regard.

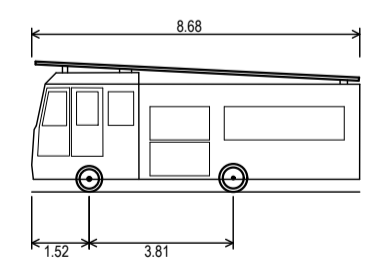
- 7.7 An accident analysis has been carried out for the area surrounding the site. During a 5 year study period, there were a low number of accidents, none of which occurred in the immediate vicinity of the site. The majority of accidents recorded were classed as being slight accidents. The development proposals will not result in an increase in traffic generation but will reduce on-street parking and improve the operation of the site. The proposals are therefore expected to improve highway safety.
- 7.8 In light of the above, the proposed development is considered to be acceptable in highway terms.

Appendix A – Proposed Site Layout



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- General Notes:**
- DO NOT SCALE.
 - This drawing is to be read in conjunction with all other relevant drawings and details.
 - Should there be any conflict between the details indicated on this drawing and those indicated on other drawings the Engineer should be informed PRIOR to construction on site.
 - Until technical approval has been obtained from the relevant Authority, it should be understood that all drawings issued are Preliminary and NOT for construction. Should the contractor commence site work prior to such approval being given, it is entirely at his own risk.
 - All dimensions are in metres unless otherwise stated.
 - Existing levels based upon HH Survey drawing Ltd HIVE/300/LP dated 23rd of November 2017.
 - The BSP Risk Assessments for this project must be reviewed PRIOR to the commencement of any works on site.
 - Prior to commencing any works on site the contractor shall check all tie ins for line and level together with the inverts and sizes of all existing drainage and inform the engineer if there is any variation with the details indicated on this or any other relevant drawings.
 - Services diversions may be required to facilitate the proposed works. Contractor to liaise with utility providers to confirm extent of diversions required.
 - The contractor is to refer to the original statutory undertakers' utility plant records. It is the contractor's responsibility to determine the location and depth of existing services prior to construction. The contractor should take note of HS(G)47 'Avoiding danger from underground services' when excavating around services.



DB32 Fire Appliance
 Overall Length 8.680m
 Overall Width 2.180m
 Overall Body Height 3.452m
 Min Body Ground Clearance 0.337m
 Max Track Width 2.121m
 Lock to lock time 6.00s
 Kerb to Kerb Turning Radius 7.910m

— Vehicle Wheel Path (Forwards)
 — Vehicle Body Envelope (Forwards)

KEY PLAN

Construction Risks	Maintenance/Cleaning Risks	Demolition/Adaptation Risks
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In addition to the hazards/risks normally associated with the type of works detailed on this drawing take note of the above.
 It is assumed that all works on this drawing will be carried out by a competent contractor working, where appropriate, to an appropriate method statement.

SAFETY HEALTH AND ENVIRONMENTAL INFORMATION BOX

Amended with New Tracking	HH	05/06/19	SAH	05/06/19	SAH	05/06/19
First Issue:	SAH	13/05/19				
REV	COMMENT	DATE	CHECKED BY	DATE	APPROVED BY	DATE
SCALE @ A1	ISSUING OFFICE	PROJECT NUMBER				
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CLIENT APPROVAL						
A - APPROVED						
B - APPROVED WITH COMMENTS						
C - DO NOT USE						
STATUS PURPOSE OF ISSUE						
S0	PRELIMINARY					
<ul style="list-style-type: none"> CIVIL STRUCTURAL TRANSPORTATION GEOTECHNICAL ENVIRONMENTAL 						
<p>12 Oxford Street Nottingham, NG1 5BG Tel: (0115) 704300 - Fax: (0115) 840228 e-mail: info@bsp-consulting.co.uk (Also offices in Derby, Leicester and Sheffield)</p>						
PROJECT						
Metrodome Leisure Complex, Barnsley						
TITLE						
Car Park Extension General Arrangement						
CLIENT						
Barnsley Premier Leisure						
PROJECT ORIGINATOR	ZONE	LEVEL	TYPE	ROLE	NUMBER	REV
METR-BSP-ZZ-XX-DR-C-001						P2