



REAP 3 Limited

PLOTS 4 AND 5, CENTRAL SQUARE, CITY CENTRE, CARDIFF

Transport Statement





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CENTRE, CARDIFF**

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TYPE OF DOCUMENT (VERSION) CONFIDENTIAL

PROJECT NO. UK0040270.4485

OUR REF. NO. CSC-WSP-XX-XX-RP-TP-000001

DATE: AUGUST 2025



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Transport Statement

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QUALITY CONTROL

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	Issue for Comment	Addressing Client Comments	Addressing Client Comments	
Date	July 2025	August 2025	August 2025	
Prepared by	Shana Driscoll / Niamh Mason	Niamh Mason	Niamh Mason	
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Signature				
Project number	UK0040270.4485			
Report number	CSC-WSP-XX-XX-RP-TP-000001			
File reference	P01 S3	P02	P03	



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1 INTRODUCTION

1.1 OVERVIEW

- 1.1.1. WSP have been commissioned by REAP 3 Limited ('the Applicant') to prepare a Transport Statement (TS) in support of the detailed planning application being submitted to Cardiff Council, for the development of Plots 4 and 5, Central Square, City Centre, Cardiff ('the site').
- 1.1.2. The site was granted permission in May 2024 (planning ref: 21/02984/MJR) for two separate buildings; a 35-storey residential-led mixed purpose tower to the west and a standalone 2-storey pavilion for commercial use to the east of the site.
- 1.1.3. This application seeks full planning permission for the following description of development:
"Mixed-use development to provide residential accommodation, flexible non-residential uses, cycle parking, landscaping and other associated works"
- 1.1.4. The proposed development includes:
- A landmark 50 storey building with a maximum height of up to 177.85m Above Ordnance Datum (AOD);
 - 528 new homes (Class C3) comprising a mix of 1-bed and 2-beds;
 - A pavilion building within Central Square comprising up to 601sqm of flexible non-residential floorspace (flexible Class A1 and A3);
 - 2,856.5sqm of high quality internal and external amenity space through provision of roof terraces, lounges, coworking, gym and other wellbeing spaces;
 - A basement level providing ancillary residential floorspace; and,
 - A car-free development with 528 cycle parking spaces within proposed building, including 5% accessible spaces, and a publicly accessible, bike hub and café. Additionally, 52 public cycle spaces are provided within adjacent square provided as Sheffield stands.
- 1.1.5. The site is within the administrative area of Cardiff Council who are the relevant Local Planning Authority when determining any planning applications on the site.
- 1.1.6. The site sits at the heart of the wider 'Central Square' regeneration area in Cardiff City Centre. Central Square is a strategically important area which Cardiff Council consider to be a gateway to the city, and an opportunity to showcase the best that Cardiff has to offer. Given the strategic importance of the location, Cardiff Council envisage that the regeneration of Central Square, towards which this development will contribute significantly, will play a key role in attracting investment on other strategically important development sites in the city.
- 1.1.7. The proposed development provides the opportunity to make a significant positive contribution to the ongoing regeneration of this part of the Cardiff. The proposed development will build upon the success of the wider Central Square area, proposing a development of exceptional architectural and residential quality. The Applicant is fully committed to the delivery of the site, and it is their ambition to create a new iconic landmark for Cardiff and Wales.
- 1.1.8. As well as the delivery of much needed high-quality homes to address Cardiff Council's housing need, the proposed development brings with it a wide range of enhanced planning and public benefits. The benefits include the delivery of a strategically important city centre site, new flexible non-residential floorspace that will activate Central Square, a publicly accessible bike hub and cafe, a new pavilion



building that can accommodate a restaurant, extensive public realm landscaping in and around the buildings, highly sustainable and energy efficient buildings, and other significant economic and social benefits for the city.

- 1.1.9. The aim of this report is to identify the transport characteristics of the development site and the surrounding areas, assess the transport impact of the proposed development and demonstrate its acceptability in transport terms.
- 1.1.10. This TS is supported by a Framework Travel Plan (FTP) to ensure that sustainable means of travel are promoted on site in line with the proposals for this development to be car-free.

1.2 STRUCTURE OF REPORT

1.2.1. The remainder of the TS is structured as follows:

- Chapter 2- Policy Review;
- Chapter 3- Existing Conditions;
- Chapter 4- Proposed Development;
- Chapter 5- Trip Generation;
- Chapter 6- Development Impacts;
- Chapter 7- Mitigation Measures; and,
- Chapter 8- Summary and Conclusions.

2 POLICY REVIEW

2.1 OVERVIEW

2.1.1. This chapter of the TS details all relevant transport related policies at a national, regional and local level that are relevant to the proposals and could have an impact on the transport aspect of the development. The key documents detailed include:

- Llwybr Newydd: The Wales Transport Strategy (2021);
- Planning Policy Wales 12 (2024);
- Well-being of Future Generations (Wales) Act (2015);
- Future Wales: The National Plan 2040 (2021);
- Technical Advice Note (TAN) 18: Transport (2007);
- Active Travel (Wales) Act (2013);
- Active Travel (Wales) Act Guidance (2021);
- Cardiff Capital Region Draft Regional Transport Plan;
- Cardiff Local Development Plan 2006-2026 (2016);
- Replacement Cardiff Local Development Plan 2021-2036;
- Managing Transportation Impacts SPG (2018);
- Tall Buildings Design Guidance SPG (2017);
- Cardiff Council White Paper (Transport Vision 2030);
- Cardiff Cycling Strategy 2016-2026; and,
- Cardiff Well-being Plan 2023-2028.

2.2 NATIONAL POLICY

Llwybr Newydd: The Wales Transport Strategy (2021)

2.2.1. The Wales Transport Strategy (WTS) sets out Welsh Government's (WG's) long-term vision for transport over the next 25 years.

2.2.2. The WTS aims to encourage people to shift to sustainable modes of transport, by making sustainable transport more attractive, affordable and accessible. To achieve this, the WTS sets out three strategic priorities linked with the Well-being of Future Generations (Wales) Act, including:

- **Priority 1** – Bring services to people in order to reduce the need to travel;
- **Priority 2** – Allow people and goods to move easily from door-to-door by accessible, sustainable and efficient transport services and infrastructure; and,
- **Priority 3** – Encourage people to make the change to more sustainable transport.

2.2.3. The strategy will deliver the ambitions through sustainable investment, delivery/action plans, building partnerships, creating policies, building skills and capacity, and holding WG to account. The strategy integrates the five ways of working set out in the Wellbeing of Future Generations (Wales) Act 2015.

2.2.4. The strategy includes nine mini-plans, which set out how individual transport sectors and modes will deliver the priorities set out within the strategy. The mini plans utilise the integrated five ways of working approach to set out ambitions in well-being, people and communities, the environment, places and the economy alongside culture and the Welsh language. This ensures that each area is actively considered throughout the progress of each transport sector.

- 2.2.5. The proposed development will provide a state-of-the-art bike hub that is publicly accessible, promoting the use of sustainable transport in the city, in line with priority 3 of the WTS. Furthermore, the proposed development will be car-free and sustainable transport modes will be heavily promoted for future residents, staff and visitors.

Planning Policy Wales 12 (2024)

- 2.2.6. National Planning Policy in Wales is comprised of Planning Policy Wales (PPW12), Technical Advice Notes (TANs), circulars and policy clarification letters.
- 2.2.7. PPW12 outlines the WG's land use planning policies. It establishes what development plans and decisions taken by the planning system must achieve and how development should be shaped to deliver the best possible outcomes.
- 2.2.8. The document states that planning authorities should support necessary transport infrastructure improvements, where it can be demonstrated that such measures are consistent with WG policies. It is anticipated that transport infrastructure should not generate significant demand for additional car movements.
- 2.2.9. The overall aims are for development plans and proposal to contribute towards the '*creation of sustainable places*' and to '*improve the well-being of communities*'.
- 2.2.10. The key planning principles, which can to a degree be applied to transportation proposals, are:
- Growing our economy in a sustainable manner;
 - Making best use of resources;
 - Facilitating accessible and healthy environments;
 - Creating and sustaining communities; and,
 - Maximising environmental protection and limiting environmental impact.
- 2.2.11. PPW12 also now includes national sustainable placemaking outcomes, which are grouped under the above principals.
- 2.2.12. Chapter 4 – Active and Social Places sets out the transport objectives and aims to enable more sustainable travel choices by influencing the location, scale, density, mix of uses and design of new development.
- 2.2.13. The WG encourages a more efficient transport system with a greater modal share of sustainable travel modes. The policy supports developments which prioritise active travel modes above public transport, with the car having the lowest prioritisation.
- 2.2.14. The proposed development complies with PPW12 by providing a highly sustainable car-free development within the centre of Cardiff, further promoting the use of sustainable transport in the city by providing a state-of-the-art bike hub.

Technical Advice Note (TAN) 18: Transport (2007)

- 2.2.15. PPW12 is supported by TAN18: Transport provides advice on:
- Integration of land use and transport planning;
 - Location of development;
 - Regional transport plans;
 - Parking; and
 - Design of development.

2.2.16. TAN 18 also sets out requirements for Transport Assessments and Transport Implementation Strategies (TIS) to assess and respond to the impacts of development, setting that the aims of undertaking the TA and producing a TIS is:

- Understanding the transport impacts of the development;
- Clearly communicating the impacts to assist the decision-making process;
- Demonstrating the development is sited in a location that will produce a desired and predicted output (for example in terms of target modal split);
- Mitigating negative transport impacts through the design process and secured through planning conditions or obligations;
- Maximising the accessibility of the development by sustainable modes; and
- Contributing to relevant development plan objectives relating to accessibility of services and modal share.

Well-being of Future Generations (Wales) Act (2015)

2.2.17. The Well-being of Future Generations (Wales) Act (2015) is targeted at improving the social, economic, environmental and cultural wellbeing of Wales. It places an obligation on public sector bodies to work together to meet seven well-being goals, the goals are summarised in **Table 2-1**.

Table 2-1 - Well-being of Future Generations (Wales) Act Goals

Goal	Description of the Goal
A prosperous Wales	An innovative, productive, and low carbon society which recognises the limits of the global environment and therefore uses resources efficiently and proportionately (including acting on climate change); and which develops a skilled and well-educated population in an economy which generates wealth and provides employment opportunities, allowing people to take advantage of the wealth generated through securing decent work.
A resilient Wales	A nation which maintains and enhances a biodiverse natural environment with healthy functioning ecosystems that support social, economic, and ecological resilience and the capacity to adapt to change (for example climate change).
A healthier Wales	A society in which people's physical and mental well-being is maximised and in which choices and behaviours that benefit future health are understood.
A more equal Wales	A society that enables people to fulfil their potential no matter what their background or circumstances (including their socio-economic background and circumstances).
A Wales of cohesive communities	Attractive, viable, safe, and well-connected communities.
A Wales of vibrant culture and thriving Welsh language	A society that promotes and protects culture, heritage, and the Welsh language, and which encourages people to participate in the arts, and sports and recreation.
A globally responsible Wales	A nation which, when doing anything to improve the economic, social, environmental, and cultural well-being of Wales, takes account of whether doing such a thing may make a positive contribution to global well-being.

2.2.18. The proposed development aligns with the Well-being of Future Generations (Wales) Act by providing a highly sustainable development within the centre of Cardiff that will provide sustainable housing to help meet Cardiff's housing needs, and generating a number of jobs helping to create a prosperous and resilient Wales.

Future Wales: The National Plan 2040 (2021)

- 2.2.19. Future Wales: The National Plan 2040 is a national development framework that sets out the direction for development in Wales and has been influenced by the Well-being of Future Generations (Wales) Act 2015. The plan outlines WG's strategy for addressing key national priorities through the planning system including sustaining and developing the economy, building climate-resilience and strong ecosystems, and improving the health and well-being of communities in Wales.
- Policy 1: In three National Growth Areas there will be growth in employment and housing opportunities and investment in infrastructure. By focusing large scale growth on the urban areas, development pressures can be channelled away from the countryside and productive agricultural land can be protected;
 - Policy 2: The growth and regeneration of towns and cities should positively contribute towards building sustainable places that support active and healthy lives, with urban neighbourhoods that are compact and walkable, organised around mixed-use centres and public transport, and integrated with green infrastructure. Urban growth and regeneration should be based on building mixed-use developments with green infrastructure as a core principle; and,
 - Policy 6: Significant new commercial, retail, education, health, leisure and public service facilities must be located within town and city centres which should have good access by public transport to and from the whole town or city and, where appropriate, the wider region.
- 2.2.20. The proposed development directly aligns with Future Wales: The National Plan 2040 by providing a highly sustainable development within the city of Cardiff, that is easily accessible through active travel and public transport.

Active Travel (Wales) Act (2013)

The Active Travel (Wales) Act (2013) sets out responsibilities for the consideration, promotion and improvement of active travel and makes provision for the following:

- Approved maps of existing active travel routes and related facilities in a local authority's area;
- Approved integrated network maps of the new and improved active travel routes and related facilities needed to create integrated networks of active travel routes and related facilities in a local authority's area;
- Local authorities to have regard to integrated network maps in preparing transport policies and to secure that there are new and improved active travel routes and related facilities;
- Welsh Ministers to report on active travel in Wales;
- Welsh Ministers and local authorities, in the performance of functions under the Highways Act 1980, to take reasonable steps to enhance the provision made for walkers and cyclists and to have regard to the needs of walkers and cyclists in the exercise of certain other functions; and
- Welsh Ministers and local authorities to exercise their functions under the Act so as to promote active travel journeys and secure new and improved active travel routes and related facilities.

Active Travel (Wales) Act Guidance (2021)

- 2.2.21. The Active Travel Act Guidance published in July 2021 brings together the previous two sets of statutory supporting guidance documents to the Active Travel (Wales) Act 2013 (i.e., the delivery guidance and the design guidance both published in 2014) and updates them. The updates of the document were based on drawing on a wide range of sources, most notably user experiences, public and stakeholder consultation feedback, policy changes, new infrastructure, and technology developments.

- 2.2.22. The guidance also, where appropriate aligns with the Department for Transport's (DfTs) Local Transport Note (LTN) 1/20 on cycling infrastructure design.
- 2.2.23. The vision for the area as stated within the guidance is:
- “for walking and cycling to become the normal choice for shorter journeys and we look forward to working with partners to turn this vision into reality.”*
- 2.2.24. The Active Travel (Wales) Act 2013 requires all local authorities in Wales to produce maps of walking and cycling networks to all key destinations including educational institutions, and to deliver year on year active travel improvements along the mapped routes. The maps now known as Active Travel Network Maps (ATNM) combine the Existing Routes Map and the Integrated Network Map required by the 2013 Act and show existing and future active travel routes to all key destinations.
- 2.2.25. The act requires local authorities to submit a report to the WG on the extent to which walkers and cyclists make active travel journeys and set out what actions have been taken to promote active travel; each time they submit their network map. They also need to report annually on the costs they have incurred making improvements to their active travel network and the activities they have undertaken to promote active travel. This puts active travel at the forefront of the transport strategy to many key destinations.
- 2.2.26. The guidance states that plan for new schools, new housing developments and/or new workplaces need to be a major consideration in creating and reviewing the ATNM, and evidence of this having been done should be provided when the ATNM is submitted for approval by Ministers.

2.3 REGIONAL AND LOCAL POLICY

Cardiff Capital Region City Deal

- 2.3.1. The Cardiff Capital Region (CCR) is comprised of 10 local authorities including Blaenau Gwent, Bridgend, Caerphilly, Cardiff, Merthyr Tydfil, Monmouthshire, Newport, Rhondda Cynon Taf, Torfaen and Vale of Glamorgan.
- 2.3.2. The CCR City Deal is a collaborative programme which aims to maintain commitment between all ten local authorities of the Cardiff Capital Region, the UK Government and the Welsh Government for regional growth and sustainable success.
- 2.3.3. The aim of the City Deal is to
- “...work together to improve the lives of people in all our communities. We will maximise opportunity for all and ensure we secure sustainable economic growth for future generations”.*
- 2.3.4. The main aims of the City Deal include:
- 25,000 new jobs;
 - +5% Gross Value Added; and,
 - £4bn Private Sector Investment.
- 2.3.5. Investments into the South East region aim to improve both:
- The business environment within the CCR, creating rich ecosystems that stretch and support the development of key sectors in the economy; and,
 - Comparative performance against other cities and regions within the UK and internationally.
- 2.3.6. The overall aim of the CCR City Deal is to make the CCR the most investible region within the UK.

Cardiff Capital Region (CCR) Draft Regional Transport Plan (RTP) 2025-2030

- 2.3.7. The CCR is the largest city region in Wales and accounts for around 50% of the total economic output of the Welsh economy, 29% of the total employment and 38,000 active businesses.
- 2.3.8. CCR is developing a draft RTP for 2025 – 2030 that will help address current and future local and regional transport issues, by providing the framework for decisions on investment in the future. This has been carried out closely alongside WG, TfW, DfT, Network Rail, other regions and private developers.
- 2.3.9. The CCR City Deal will be closely used as the basis for the RTP with the main aims including the:
- Development and delivery of rail improvements in the CCR;
 - Management of the Traws Cymru bus network;
 - Development and delivery of active travel improvements on the trunk road network; and,
 - Development and delivery of highway improvements on the trunk road network.
- 2.3.10. The goal of the RTP is to enhance the quality of life for local people through investment in people, transport, businesses, homes, and communities. With new responsibilities for strategic transport, planning and economic well-being, the RTP aims to interlink transport directly with other areas for improvement to ensure coherent progress.

Cardiff Local Development Plan 2006-2026 (2016)

- 2.3.11. The Local Development Plan (LDP) for Cardiff sets out the strategy and policy framework for the development and conservation of the city up to 2026.
- 2.3.12. The LDP strategy sets out 18 Key Policies (KP) to guide development and the provision of new homes and jobs in Cardiff. Some of those KP's which are relevant to the proposals from a transport and highways perspective are as followed:
- KP1- Level of Growth;
 - KP4- Master Planning Approach;
 - KP5- Good Quality and Sustainable Design;
 - KP6- New Infrastructure;
 - KP7- Planning Obligations;
 - KP8- Sustainable Transport;
 - KP14- Healthy Living; and,
 - KP15- Climate Change.
- 2.3.13. It is noted in the plan that there is an aspiration for Cardiff to achieve a 50:50 modal split between journeys by car and journeys by walking, cycling and public transport.
- 2.3.14. The plan states that the delivery of over 40,000 new jobs will be achieved through utilising public transport corridors and neighbourhood centres as key areas for the development of high-density residential and mixed-use developments. In addition, it states that new infrastructure must consider sustainable transport networks alongside public transport networks to encourage use of the local cycle network.
- 2.3.15. The LDP strategy also sets out nine transport policies, which have been summarised below:
- **T1 – Walking and Cycling** sets out the Council's key objective to provide high quality, sustainable design which makes a positive contribution to the distinctiveness of communities and

provide connections and extensions to the Cardiff Strategic Cycle Network and routes forming part of the Cardiff Walkable Neighbourhoods Plan;

- **T2 – Strategic Rapid Transport and Bus Corridors** identifies the need for strategic bus improvements across Cardiff to enhance public transport use;
- **T3 – Transport Interchanges** identifies the need for improvements to be made to existing rail stations and bus interchanges to facilitate and accommodate new development;
- **T4 – Regional Transport Hub** states that support will be given to the development of infrastructure and facilities in and around Cardiff Central Railway Station, to enhance access and encourage sustainable travel;
- **T5 – Managing Transport Impacts** identifies the need to provide safe and convenient provision for pedestrians (including those with prams), disabled persons, cyclists, powered two-wheelers, and public transport;
- **T6 – Impact on Transport Networks and Services** states that *‘development will not be permitted which would cause unacceptable harm to the safe and efficient operation of the highway, public transport and other movement networks including pedestrian and cycle routes, public rights of way and bridle routes’*;
- **T7 – Strategic Recreational Routes** identifies the need to maintain and develop strategic recreational routes across Cardiff; and,
- **T8 – Cardiff City Region ‘Metro’ Network** outlines that the Council will seek to facilitate the development of a future regional ‘Metro’ network of integrated public transport routes and services within Cardiff and connecting the city with the wider south-east Wales region.

2.3.16. The Cardiff LDP also sets out the development site within the Cardiff Central Enterprise Zone and Regional Transport Hub Strategic Site. This includes multiple development projects as part of the Central Square Masterplan with the development site being the sixth part of the enterprise zone. These can be seen in Appendix A.

2.3.17. The proposed development will provide additional employment opportunities and additional local facilities for the surrounding residencies to feed into the delivery of this policy. Furthermore, the proposals include for a car-free development, helping to support Cardiff’s modal split aim of 50:50 between journeys by car and journeys by walking, cycling and public transport.

2.3.18. The proposed development directly aligns with the Cardiff LDP through the provision of a highly sustainable, landmark development in the centre of Cardiff that is envisaged to significantly contribute to the regeneration of the Cardiff Central Square area of the city.

Replacement Cardiff Local Development Plan 2021-2036

2.3.19. The existing Cardiff LDP was adopted in 2016 and covers the period 2006 - 2026. To ensure that LDPs are kept up-to-date, local planning authorities are required to start a full review of their plans at least once every four years following plan adoption.

2.3.20. These updates will ensure that the Replacement Local Development Plan (RLDP) is fully compliant with PPW Edition 12 and Future Wales. The RLDP is set to be adopted for the period 2026-2036 and it underwent public consultation from January 2025 to April 2025.

2.3.21. The draft vision for the RLDP that was shared during the abovementioned consultation is to *‘create a fair, healthy, more liveable, sustainable, low carbon and bilingual city.’*

2.3.22. The draft objectives of the RLDP are set out as follows:

- Responding to future needs;
- Creating a more sustainable and healthier city which responds to the challenges of climate change and enhances the wellbeing of future generations; and,
- Looking after natural, historic & cultural assets.

Managing Transportation Impacts SPG (2018)

2.3.23. The Managing Transportation Impacts’ Supplementary Planning Guidance (SPG) sets out the Council’s approach to assessing and managing the transport impacts of development, including the need for Transport Assessments and mitigation measures that should be adopted.

2.3.24. The SPG also puts forward parking standards based on land-use types and recognises the role parking provisions can play in managing travel demand. The cycle parking standards for Residential Dwellings (C3) and Retail Units (A1/A2/A3) have been summarised in **Table 2-2**.

Table 2-2 – Cardiff Cycle Parking Standards (Central areas in Cardiff)

Land Use		Minimum Cycle Parking Guidance
Residential Dwellings (C3)		1 per bedroom
Retail Units (A1/A2/A3)	Staff	2 spaces per 100sqm
	Visitors	1 space per 100sqm

Tall Buildings Design Guidance SPG (2017)

- 2.3.25. The SPG supplements policies in the adopted Cardiff LDP in more detail to tall buildings.
- 2.3.26. Section 3 of the SPG identifies that tall buildings are acceptable only in highly accessible active travel areas with good walking, cycling as well as bus stop on core routes.
- 2.3.27. The SPG identifies those proposals in sustainable locations, reduced or zero parking provision will be sought which will ensure that the development is not dominated by its parking provision.
- 2.3.28. Due to the central location, its location relative to public transport and the cycle network makes it a highly sustainable development with intentions to be car-free.

Cardiff Council White Paper (Transport Vision 2030)

2.3.29. This document presents Cardiff’s ambition to influence the city’s travel patterns towards sustainable forms of transport and away from the use of private vehicles. This is reflected within the council’s modal split targets for 2011, 2021 and 2026 which aim for 60% of travel by 2026 to be made by sustainable travel modes.

Cardiff Cycling Strategy 2016-2026

2.3.30. The city’s cycling strategy seeks to develop Cardiff into a place *where “cycling is normal, practical and a safe choice for short trips”*, it also sets out an aim to double the number of cycle trips in the city by 2026, by implementing the following key actions:

- Make a step-change in the integration of cycling into transport planning and urban place-making;

- Provide the right infrastructure to allow cycling to be seen as a viable travel option, for people of all ages and abilities of cycling; and
- Integrate cycling with the way the Council carries out its core business.

2.3.31. The Cardiff Cycling Strategy also ties in with modal shift targets as set out at KP8 (Sustainable Transport) identified within the LDP, to achieve a 50/50 modal split with cycling accounting for approximately 20% of sustainable travel.

2.3.32. The proposed development will directly align with the Cardiff Cycling Strategy by providing a state-of-the-art bike hub in the centre of Cardiff that is expected to promote the use of cycling in the city by providing secure parking spaces.

Cardiff Well-being Plan 2023-2028

2.3.33. The Cardiff Public Service Board (PSB) is required to produce a new Well-being Plan every five years. Cardiff PSB draws together all public service leadership and decision-makers for the city including Local Authorities, Health Boards, Natural Resources, WG, the Third Sector and the Fire, Police and Probation services¹. The purpose of their work is to improve the economic, social, environmental and cultural well-being of Cardiff by strengthening the connections between individual public services.

2.3.34. This current Well-being Plan sets out the priorities for the period 2023-2028 that the city's public services will carry forward and acts as a complementary document to the strategic plans and Well-being Objectives of each PSB member to encourage collaboration.

2.3.35. The Well-being Plan provides the basis for understanding the interconnection between key public services and the demand for these services to adapt to a developing city. Through assessing the transport impacts of the proposed development, the Well-being Plan must be considered to understand how the proposed development will aid in improving interconnection between key public services.

2.4 POLICY SUMMARY

2.4.1. From the policy review undertaken, it is evident that the proposed development will align with the national, regional and local policy by providing a car-free development that will actively encourage the use of sustainable transport modes which will contribute to Cardiff Council's modal share goals.

2.4.2. Furthermore, the proposed development is also in line with the Cardiff LDP by providing a highly sustainable, landmark development in the centre of Cardiff that is envisaged to significantly contribute to the regeneration of the Cardiff Central Square area of the city.

¹ <https://cardiffpartnership.co.uk/wp-content/uploads/2023/04/Local-Well-being-Plan-2023-28-FINAL-ENG.pdf>

3 EXISTING CONDITIONS

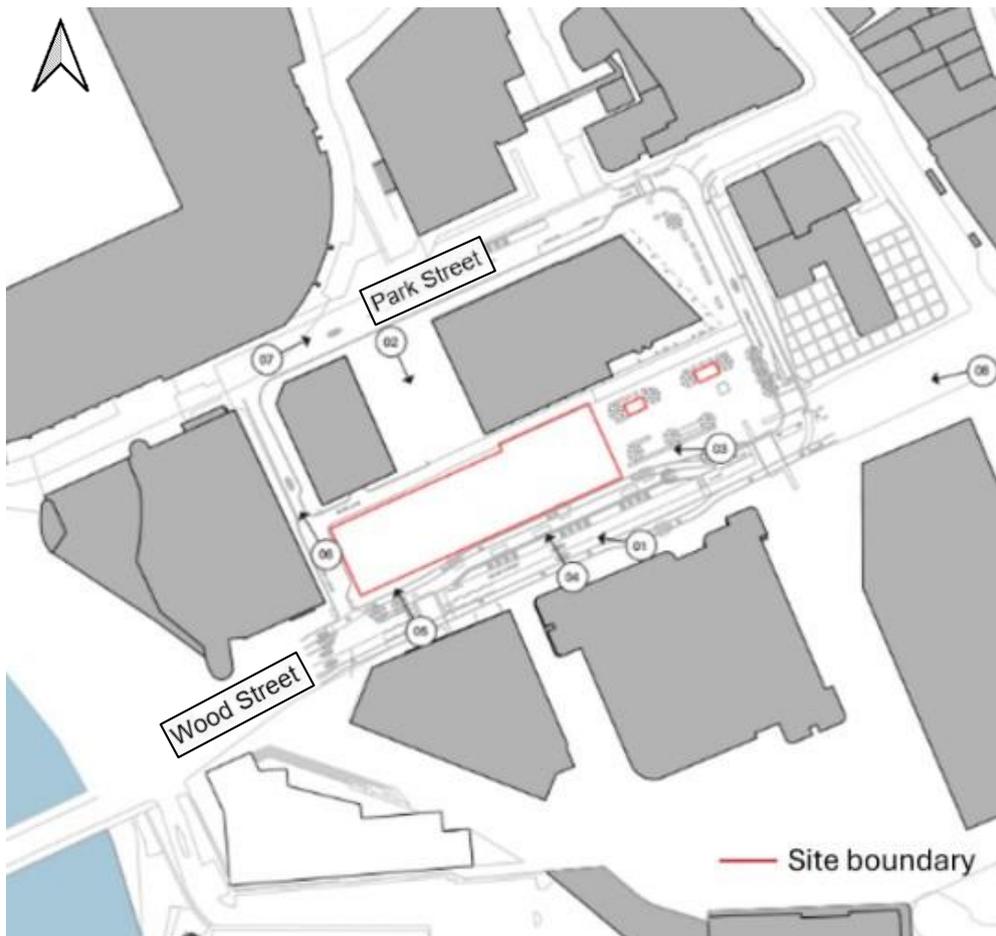
3.1 OVERVIEW

- 3.1.1. This section provides an overview of the existing transport conditions surrounding the proposed development area. This will provide an overview of pedestrian, cycle, public transport facilities, amenities and all highway networks in the immediate proximity of the site.
- 3.1.2. To help inform this section of the TS, multiple site walkovers have been completed by WSP between March and July 2025.

3.2 SITE LOCATION

- 3.2.1. The proposed development site is located within the city centre of Cardiff (Plots 4 and 5, Central Square, Cardiff). The site is 0.21ha and comprises a cleared rectangular plot of land, alongside two smaller parcels of land located to the north of Wood Street within the public realm (these smaller parcels will accommodate public cycle parking spaces). The site is bound by Wood Street to the south, Scott Road to the west, Park Street Lane to the north-west, and a public square to the east.
- 3.2.2. The location of the site is presented in **Figure 3-1**.

Figure 3-1 - Site Location Plan



- 3.2.3. The Media Wales office building is located at 6 Park Street, immediately adjacent to the northwest of the site. The HMRC building is located immediately adjacent to the northeast of the site. The

Millennium Plaza leisure complex is located immediately to the west. To the south of Wood Street lies the Cardiff University School of Journalism, Media and Culture, and the BBC Cymru building. The Principality Stadium is located further to the north and can be accessed via Central Square.

- 3.2.4. The site sits within the Cardiff Central Square Masterplan area (as presented in Appendix A). Whilst this masterplan was never formally adopted, it has catalysed significant development and has led to the transformation of the area in and around Cardiff Central Station. The prevailing building heights ranges between 7 to 25 storeys, which includes buildings of a variety of land uses and architectural styles.
- 3.2.5. The site is highly accessible due to its position within Cardiff's public transport network with it being adjacent to bus stops on Wood Street, a 130m walk away from Cardiff Central Station and 110m walk to the Cardiff Central Bus Interchange.

3.3 EXISTING USE AND PLANNING HISTORY

Existing Use

- 3.3.1. The site is not currently in use and comprises a 0.21ha cleared rectangular plot of land, alongside two small parcels of land located to the north of Wood Street.

Planning History

- 3.3.2. The site benefits from full planning permission for the following development (Ref: 21/02984/MJR), which was granted by the Council on 2nd May 2024:

'Full planning application for a mixed-use building providing commercial uses at ground floor/mezzanine level (Use Classes A1/A2/A3/B1/D1/D2) and residential accommodation above (Use Class C3 and including non C3 Use Class residential), a pavilion (Use Classes A1/A2/A3), public realm, cycle parking, access, drainage and other infrastructure works required for the delivery of Central Square Plots 4 and 5.'

Recent Enhancement Works

- 3.3.3. Wood Street has recently benefitted from multiple cycle and pedestrian improvement works. These have involved the construction of a two-way segregated cycle lane, improved pedestrian and cycle crossings alongside improved public realm enhancements. The improvements provide better connections within the Cardiff Central Square Area towards Cardiff Central Station, Cardiff Bus Interchange and shopping facilities further east in Cardiff City Centre. The improvements are shown in **Figure 3-2**.

Figure 3-2 - Improved Cycle and Pedestrian Infrastructure Wood Street



3.4 TRAVEL CHARACTERISTICS

3.4.1. Method of Travel to Work data was collected from the 2021 Census² to inform the modal share for the study area. The data was derived from Middle Layer Super Output Areas (MSOA) Cardiff 032, which the site is located within and has been compared to national level statistics. Due to the nature of the Census being undertaken in 2021 during a national lockdown, the data related to homeworking has been discounted to ensure a more accurate representation of the modal share, the data has been presented in **Table 3-1**.

Table 3-1 – 2021 Method of Travel to Work Data (2021 Census)

Method of Travel to Workplace	MSOA Site Area (Cardiff 032)	Wales
Underground, metro, light rail, tram	0.1%	0.1%
Train	4.7%	1.1%
Bus, minibus or coach	7.5%	3.1%
Taxi	1.1%	0.7%
Motorcycle, scooter or moped	0.3%	0.5%
Driving a car or van	36.3%	75.9%
Passenger in a car or van	4.3%	6.5%
Bicycle	7.7%	1.5%
On foot	36.5%	9.5%
Other method of travel to work	1.4%	1.1%

2

<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/traveltoworkenglandandwales/census2021>

3.4.2. Based upon the 2021 Census data, it is evident that the greatest proportion of the population travel to work on foot at 36.5% with the second being by car or van at 36.3%. As the site is located within close proximity of public transport services (Cardiff railway station and Cardiff Bus Interchange), it is reasonable to assume that residents of the proposed development who do travel by car or van to consider more sustainable transport modes.

3.4.3. It is also evident that a greater proportion of people use public transport (12.2%) than the national average (4.2%), which highlights the sustainable location of the site.

3.5 ACCESSIBILITY BY SUSTAINABLE TRANSPORT MODES

3.5.1. This section of the report analyses the accessibility of the site by walking, cycling and public transport.

WALKING

3.5.2. Walking as a mode of travel has the potential to replace short distance vehicle journeys and can also form part of a combined mode journey from places not within a reasonable walking distance.

3.5.3. In accordance with the national and local policies, emphasis is placed on active travel above all other modes, as such, walking is considered an important travel method for short journeys with developments in the city centre encouraged to promote and encourage walking and a healthy lifestyle.

3.5.4. The site located to the north of Wood Street, which is located to the north of Central Square, Wood Street provides footpaths on both sides of the carriageway and provides multiple signalised crossing points to access key amenities south of the site within Central Square. The pedestrian provision on Wood Street is presented in **Figure 3-2**.

3.5.5. To the south of Wood Street, Central Square is fully pedestrianised as presented in **Figure 3-3**.

Figure 3-3 - Central Square



3.5.6. To the southwest of the site, footpaths continue on both sides of the carriageway on Wood Street across the Wood Street Bridge towards Tudor Street and Fitzhamon Embankment. The footway provision on the Wood Street Bridge is presented in **Figure 3-4**.

Figure 3-4 – Wood Street Bridge Footway Provision



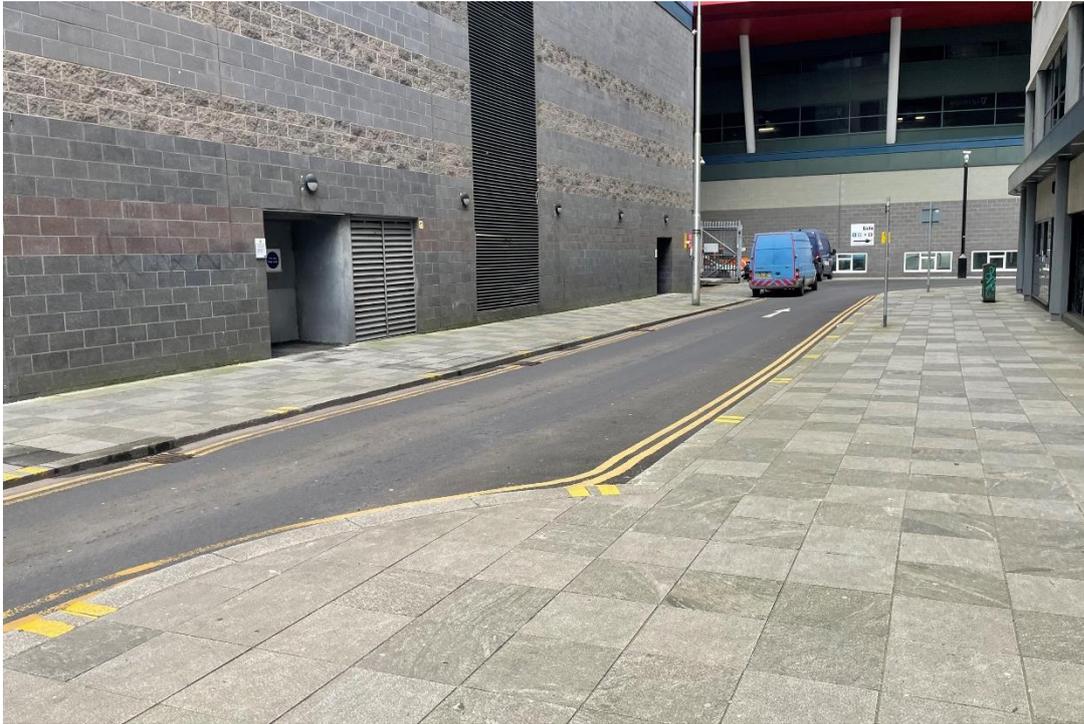
3.5.7. Additionally, the footways on Wood Street can also be used to access Westgate Street and St Mary Street further to the east. The access points to Westgate Street and St Mary Street from Wood Street can be seen in **Figure 3-5**.

Figure 3-5 - Access to Westgate Street and St Mary Street



3.5.8. To the west of the site, Scott Road provides footways on both sides of the carriageway, with dropped kerbs and street lighting. The footway provision on Scott Road is presented in **Figure 3-6**.

Figure 3-6 – Footway Provision on Scott Road



- 3.5.9. Rose Lane, located to the north of the site connects the proposed site with Scott Road and Park Street, at the time of the site walkover, pedestrian movements were restricted due to construction activity.
- 3.5.10. Further to the north of the site, Park Street connects to Scott Road in the east and Westgate Street through Havelock Street to the west. Park Street provides footways on both sides of the carriageway in addition to a signalised crossing at its junction with Havelock Street and another at its junction with Westgate Street. The footway provision on Park Street is presented in **Figure 3-7**.

Figure 3-7 - Park Street Footway Provision



- 3.5.11. MfS guidance states that it is generally acknowledged that walking offers the greatest potential to replace short car trips, particularly under 2km. In addition, the Institute of Highways and Transport (IHT) guidance on suggested acceptable walking distances set out in ‘Providing for Journeys on Foot (2000)³ states that the average length of a walking journey is 1km and this differs little by age.
- 3.5.12. The IHT guidance acknowledges that “acceptable” walking distances will vary between individuals and circumstances. The guidance identified “desirable”, “acceptable” and “preferred maximum” distances for commuting/education journeys as shown in **Table 3-2**.

Table 3-2 – Acceptable Walking Distances

Distance Class	Town Centre (m)	Commuting/Education (m)	Elsewhere (m)
Desirable	200	500	400
Acceptable	400	1,000	800
Preferred Maximum	800	2,000	1,2000

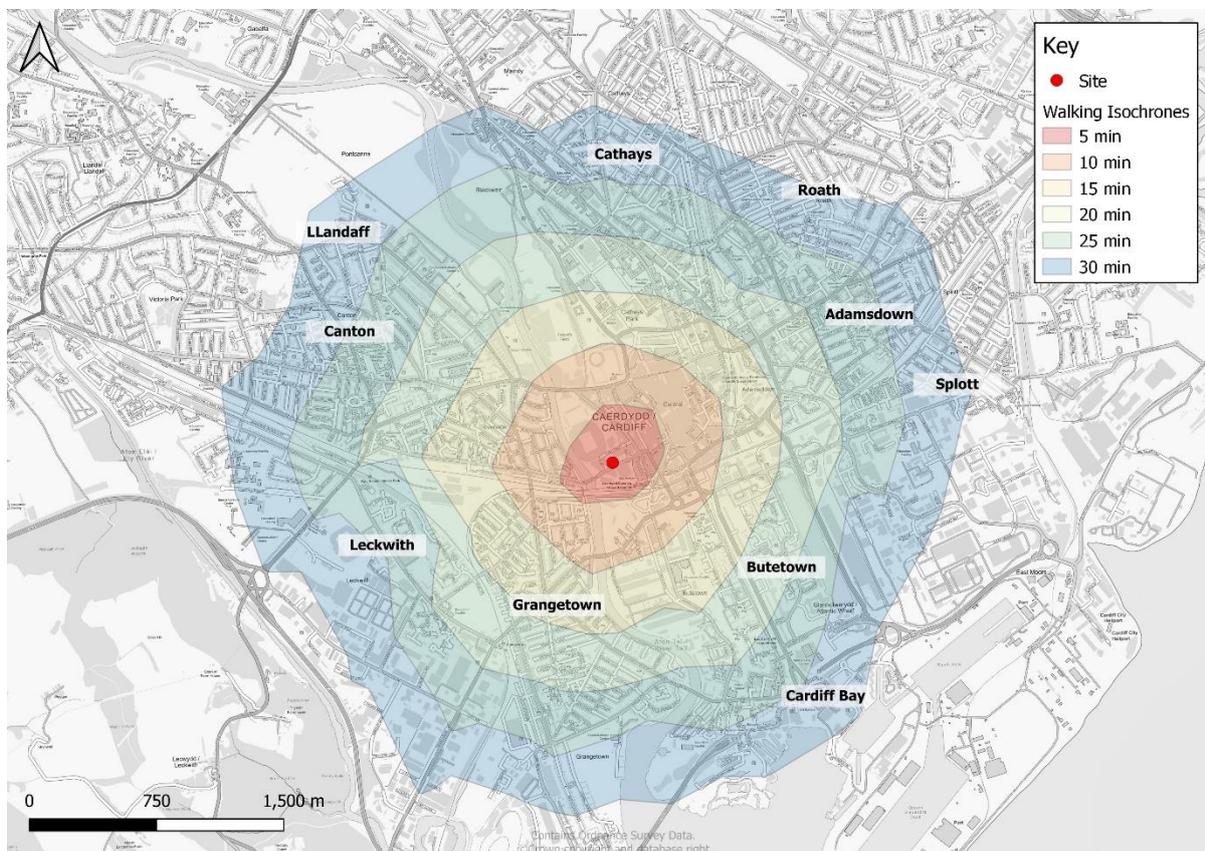
Source: Providing for Journeys on Foot, IHT (2000)

3

https://programmeofficers.co.uk/Wirral/CoreDocuments/CD3/CD03.10_CIHT%20guidelines%20for%20providing%20for%20journeys%20on%20foot%202000.pdf

- 3.5.13. **Table 3-2** indicates that the preferred maximum distances for commuting/education journeys are up to 2km and that the acceptable walking distance is 1km. The proposed development site being located within 400m of the town centre falls within acceptable walking distances making it easily accessible to multiple city centre amenities.
- 3.5.14. Differences in the propensity to walk by journey purpose may relate to individuals being more willing to walk on foot to locations that have the greatest need to reach and/or where longer time may be spent upon arrival (for example work or school).
- 3.5.15. Considering the average walking speed of 1.4m/s stated within the IHT guidance, it can be assumed that all walking trips fall within 30 minutes. As such, walking isochrones which illustrate the indicative area located within 30 minutes walking distance from the centre of the proposed development site have been developed and are shown in **Figure 3-8**.

Figure 3-8 - Walking Isochrone



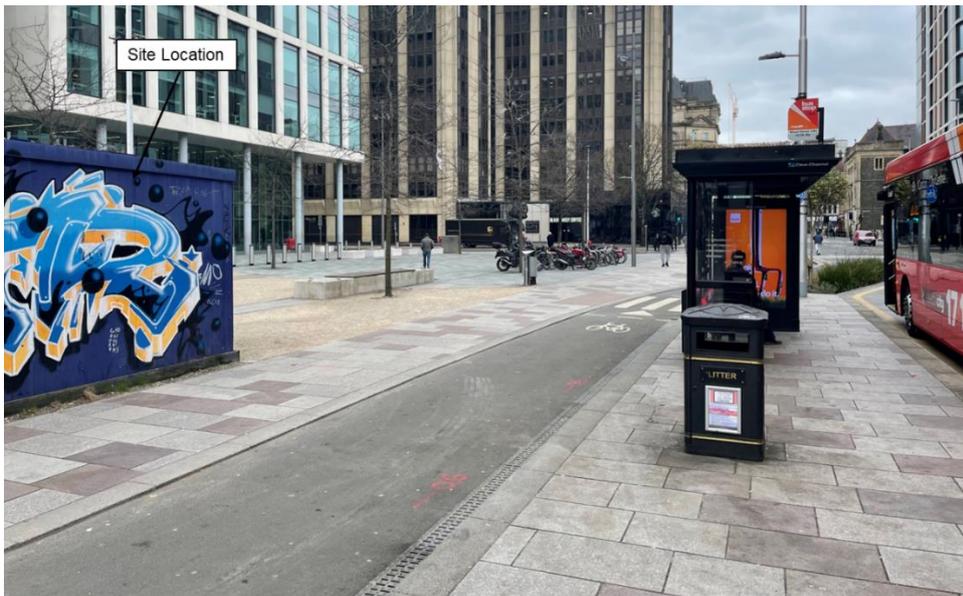
- 3.5.16. **Figure 3-8** shows that the entirety of Cardiff Town Centre can be accessed within a 10-minute walk of the site, additionally it shows that, making it easy for those wanting to access leisure, employment and education amenities from the site. Further locations such as Llandaff and Cardiff Bay can be accessed within a 30-minute walk of the site.

CYCLING

- 3.5.17. Cycling as a mode of travel has the potential to replace short and medium distance vehicle journeys and can also form part of a multi-modal journey from places not within a reasonable cycling distance.

- 3.5.18. National and local policies place emphasis on active travel above all other modes. Amongst active travel modes, cycling is considered an important travel method for short, medium and long journeys. As such, developments in the city centre should be designed to promote and encourage cycling as one of the main methods of travel.
- 3.5.19. Within the immediate vicinity of the development site there are a range of cycle amenities including designated cycle lanes and bike racks (as described within this chapter). To the south of the site, Wood Street provides a segregated cycle lane on both sides of the carriageway, the cycle lane to the south of the site is pictured in **Figure 3-9**.

Figure 3-9 - Wood Street Cycle Facilities



- 3.5.20. To the north of the site, Park Street provides a segregated cycle lane, allowing for cyclists to easily travel to Westgate Street (as shown in **Figure 3-10**).

Figure 3-10 - Park Street Cycle Facilities



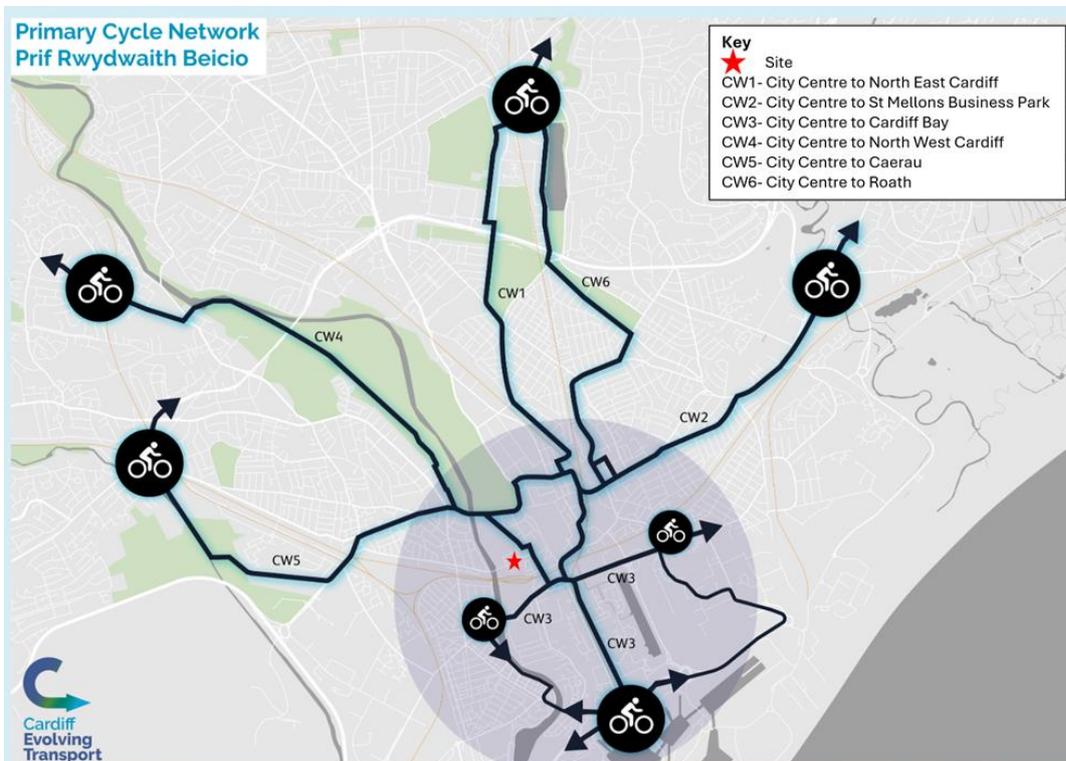
3.5.21. To the east of the site, Havelock Road provides a segregated cycle lane, connecting to Wood Street, as shown in **Figure 3-11**.

Figure 3-11 - Havelock Street Cycle Facilities



3.5.22. Cardiff Council are currently developing proposals for six cycleways in Cardiff to support and promote cycling for all ages and abilities, connecting major destinations across the city. These can be seen below in **Figure 3-14**.

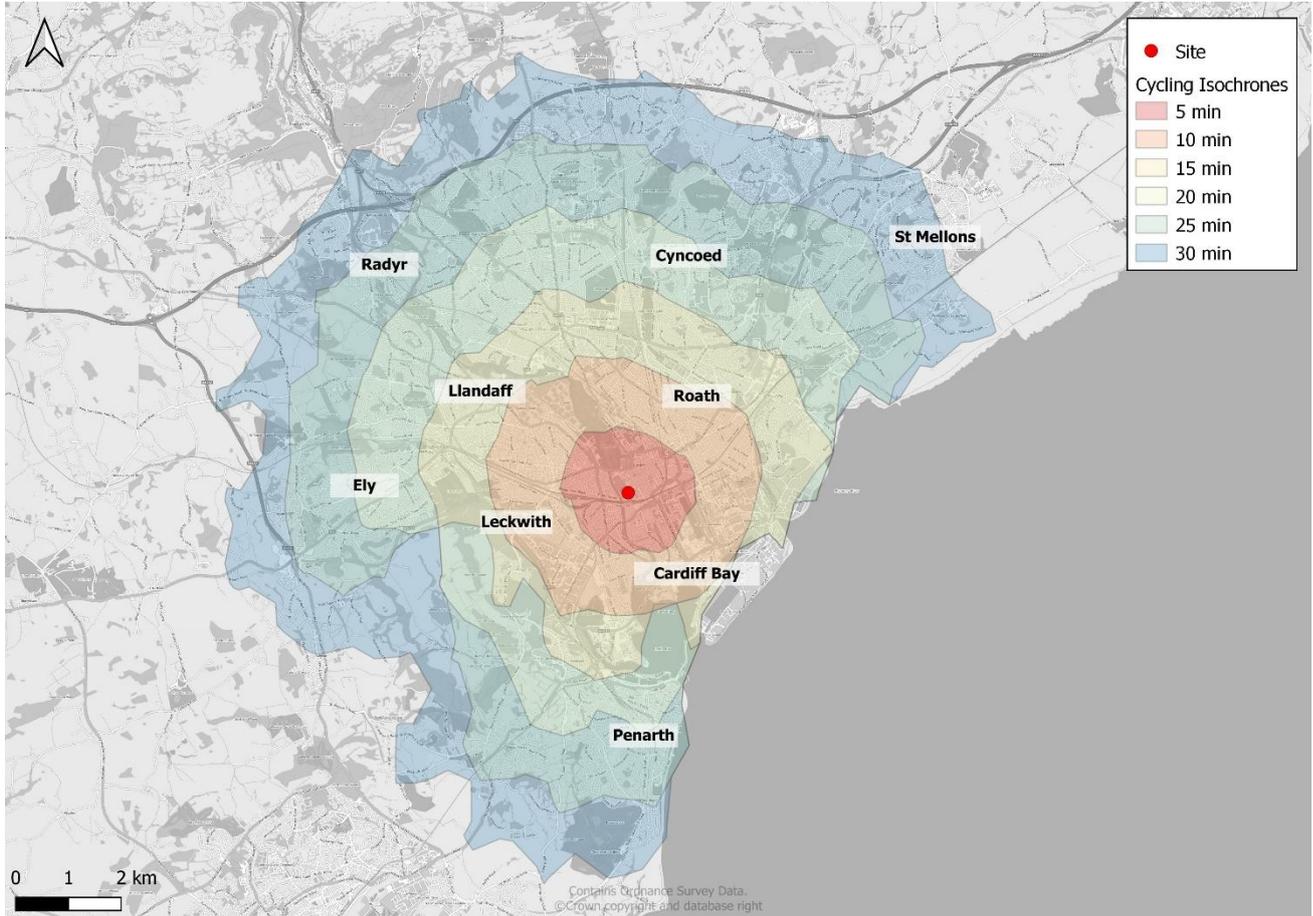
Figure 3-12 - 6 Cycleways Cardiff



Source: <https://www.cardiff.gov.uk/ENG/resident/Parking-roads-and-travel/travel/cycle-super-highways/Pages/default.aspx> [Accessed April 2025].

3.5.23. The DfT's LTN 1/20 'Cycle Infrastructure Design' states that 75% of all cycling journeys are up to 8km (5 miles)⁴. Considering the average cycling speed of 4.44 m/s as stated within Sustrans 'Cycle Friendly Employers' Information Sheet', it can be assumed that the majority of cycling trips fall within 30 minutes⁵. As such, cycling isochrones which illustrate the indicative areas located within 30-minutes cycling distance of the development site have been provided in **Figure 3-13**.

Figure 3-13 - Cycling Isochrones



3.5.24. The isochrones above indicate that from the centre of the development site, cyclists can reach areas such as Roath and Cardiff Bay within a 10-minute cycle and within 15 to 25 minutes cyclists can reach areas such as Llandaff and Cyncoed. Furthermore, areas such as Radyr, Penarth and St Mellons are accessible within 30 minutes of the site.

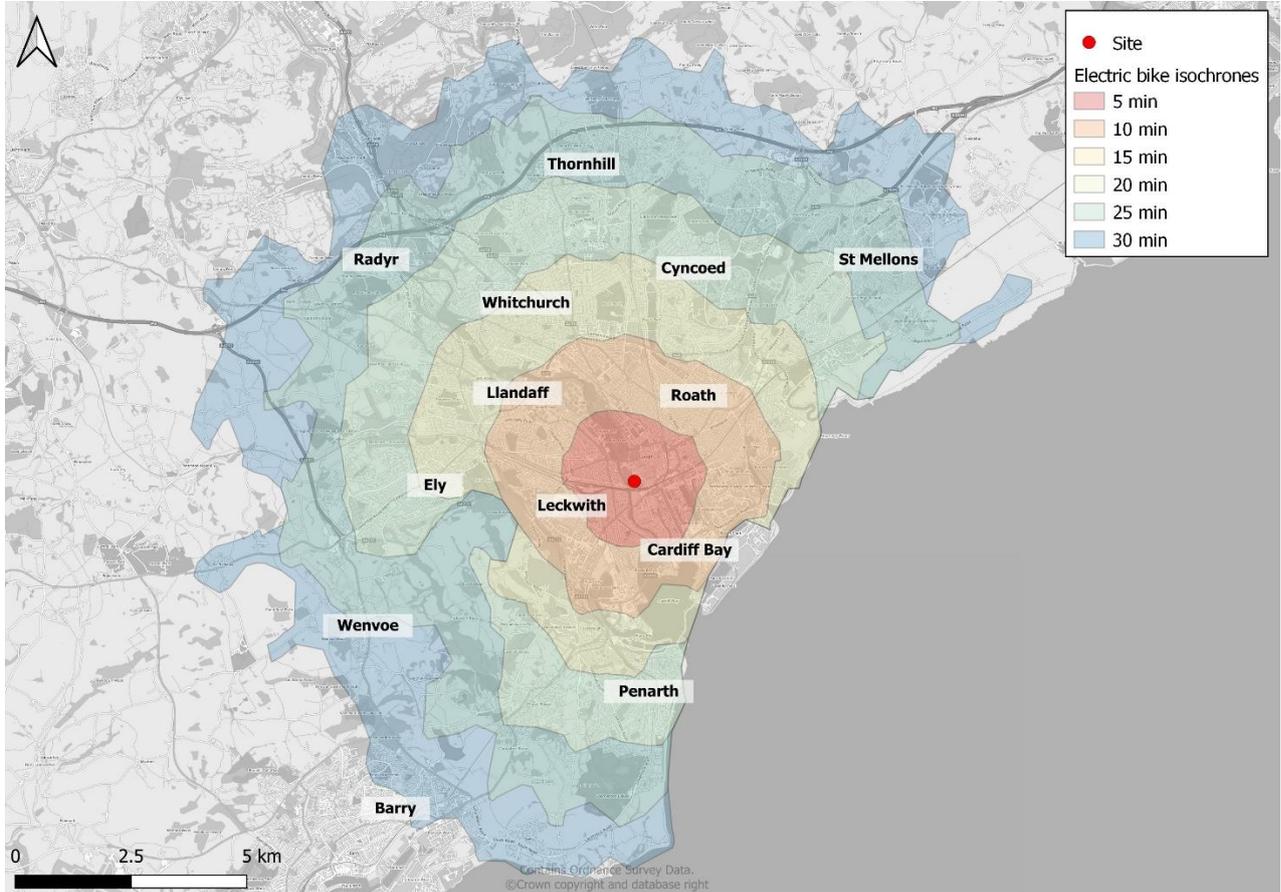
3.5.25. Further to the above, electric bike isochrones have been generated on the average speed of 13mph which assumes a 20% increase in speed from a regular bike. Electric bike isochrones which illustrate

⁴ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/951074/cycle-infrastructure-design-ltn-1-20.pdf

⁵ <http://funding4sport.co.uk/downloads/sustrans-cycling-to-work.pdf>

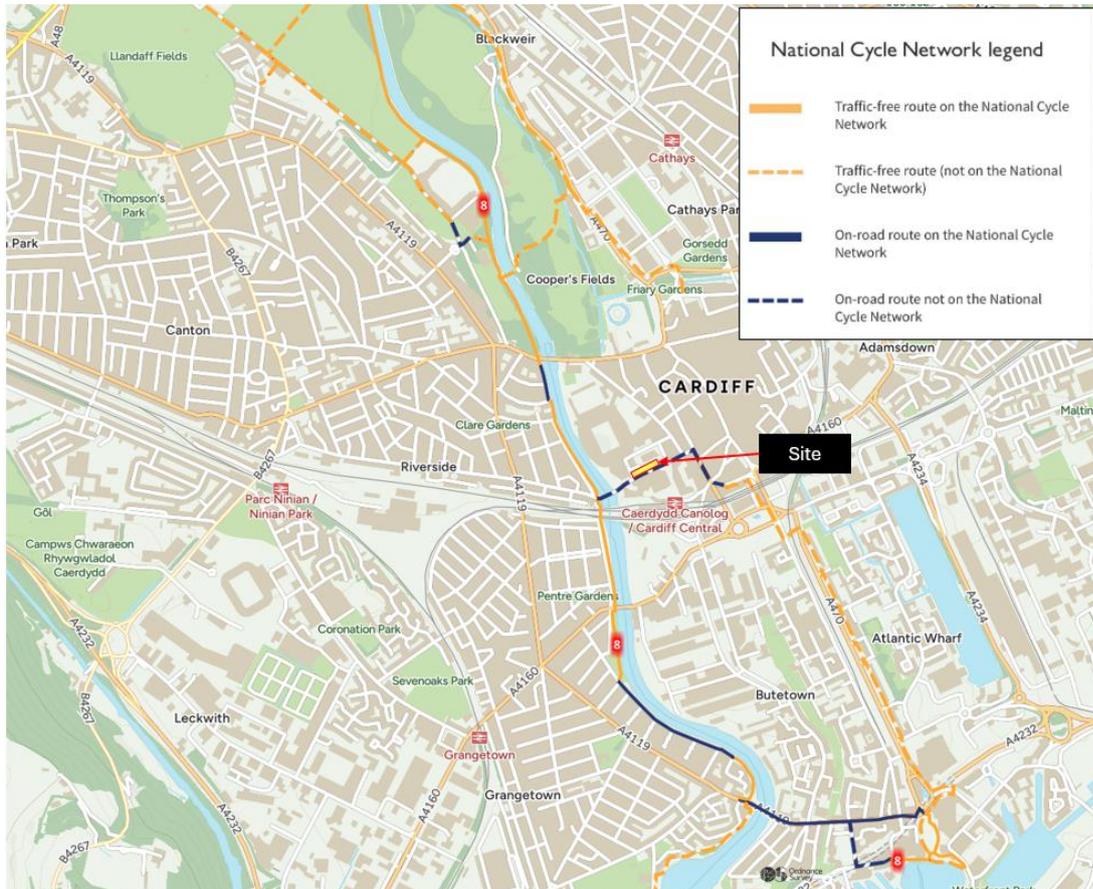
the indicative area located within a 30-minute electric cycling distance of the development site have been presented in **Figure 3-14**.

Figure 3-14 - Electric Bike Isochrones



- 3.5.26. **Figure 3-14** demonstrates that further distances can be accessed via electric bike from the development site. For example, areas such as Roath, Llandaff and Cardiff Bay can be accessed in 5 to 10 minutes. In addition to this, areas such as Whitchurch and Penarth can be accessed in 20 to 25 minutes. Further locations such as Barry can also be accessed in around 30 minutes via electric bike.
- 3.5.27. There are various National Cycle Network (NCN) routes present within the vicinity of the site, as shown in **Figure 3-15**. The closest NCN route to the development site is route 8 which is located between Cardiff Bay and Castle Coch and connects users with areas such as Llandaff, Radyr and Whitchurch. Route 8 can also be used to connect to route 4 which is located between Nantgarw and areas across West Wales, this route can be used to connect to locations such as Caerphilly and Pontypridd.

Figure 3-15 - National Cycle Network Map



Source: <https://www.sustrans.org.uk/find-a-route-on-the-national-cycle-network/?location=Wales&distance=null&routetype=null&p=1>

3.5.28. Cardiff Council has confirmed plans to launch a new electric cycle hire scheme programme in the city, whilst a set date hasn't been provided for the launch, it is expected that the scheme may be implemented in 2026⁶. The provision of a shared cycle hire scheme in the city, replacing the Nextbike programme that operated between 2018-2023 will help promote the use of cycling in the city.

Cycle Parking

3.5.29. Due to the central location of the site, there are a number of existing cycle parking spaces within close proximity of the site location. The locations of the existing cycle parking provision surrounding the proposed site is presented in **Figure 3-16**.

3.5.30. To understand the existing level of usage of the cycle parking surrounding the site, an audit of the capacity of the cycle parking spaces has been undertaken during a number of different scenarios:

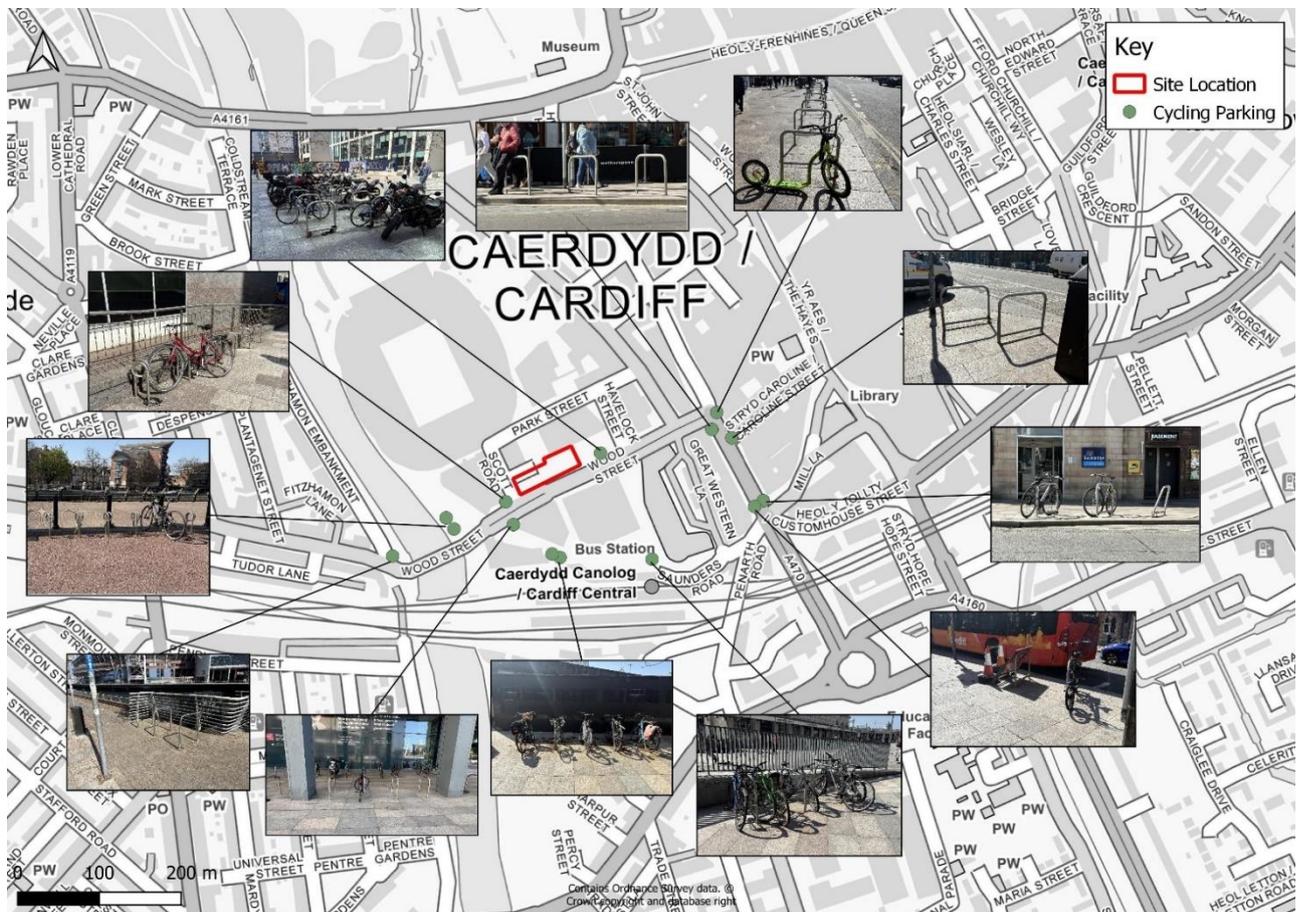
- Standard weekday during working hours; and,
- Standard weekday after working hours.

6

<https://www.cardiffnewsroom.co.uk/releases/c25/35667.html#:~:text=Cardiff's%20New%20Electric%20Bike%20Hire,be%20left%20in%20approved%20locations.>

- 3.5.31. The cycle space audit found that the majority of the cycle parking areas shown in **Figure 3-16** see a reduction in utilisation after normal working hours, reducing from 27% occupied during work hours to 19% occupied after work hours, suggesting that the cycle parking spaces are utilised by commuters within the city centre. The state-of-the-art bike hub, proposed as part of this scheme will complement the existing cycle parking by providing a more secure and attractive cycle parking facility for commuters in the city centre.
- 3.5.32. There are a number of the cycle parking spaces that are utilised by motorcycles during the workday, particularly in front of the HMRC building to the east of the site.
- 3.5.33. The full results of the cycle space audit, inclusive of imagery and utilisation percentages have been presented in Appendix C.

Figure 3-16 - Cycle Parking Provision Surrounding the Site



- 3.5.34. Furthermore, Cardiff Council have also provided a Brompton Bike Hire docking station at Cardiff Central station (170m to the south of the site) which provide users with the option of combining a bike with a train or bus trip and therefore promotes multi-modal journeys.

3.5.35. The Brompton Bike Hire dock located to the front of the station is pictured in **Figure 3-17**, users of the Brompton Bike Hire dock can reserve bikes up to 24 hours in advance and pay £5 for 24 hours of hire. The bikes can be hired for up to 60-days when they are required to be returned for routine inspection⁷.

Figure 3-17 - Brompton Bike Hire Dock



3.5.36. In addition, Cardiff Council are proposing to install 50-100 secure cycle parking spaces in key locations in 2025, if the first 50 to 100 are successful the Council will look to install more across the city. The proposals include for secure bike lockers that are locked and paid for via a mobile phone app. The Council ran a public consultation between February and March 2025 to gain feedback on the proposed locations which include Wood Street⁸. The first six secure cycle parking units will be installed on the 1st August outside of Cardiff Castle⁹, a visual provided by the Council on the proposed design of the cycle parking lockers are presented in **Figure 3-18**.

⁷ <https://bromptonhire.com/>

⁸ <https://www.cardiff.gov.uk/ENG/Your-Council/Have-your-say/Live-Consultations/Secure-cycle-parking-proposals/Pages/default.aspx#:~:text=What%20we%20are%20proposing,install%20more%20across%20the%20city.>

⁹ https://www.cardiffnewsroom.co.uk/releases/c25/35710.html?utm_source=Twitter&utm_medium=social&utm_campaign=Orlo&utm_content=CITY+OPERATIONS

Figure 3-18 - Cardiff Council Proposed Cycle Parking Lockers



Source: Cardiff Council

3.5.37. To complement the existing cycle parking facilities available in the city centre, the proposed development also includes the provision of a state of the art, publicly accessible cycle parking hub. It is proposed that the cycle parking hub will provide secure hireable cycle parking with staff for members of the public, with free parking available for visitors of the proposed development. More information on the secure cycle parking hub is provided in Chapter 4.

LOCAL AMENITIES

3.5.38. This section of the report identifies the local facilities and amenities within walking and cycling distance of the site. The guidance used to inform this section of the TS include MfS and CIHT which have been summarised in the walking and cycling section of this chapter.

3.5.39. **Table 3-3** provides a summary of the key local facilities and amenities, their respective distances and the walk / cycle time from the site.

Table 3-3 – Local Facilities and Amenities

Local Facility/Amenity*	Approximate Distance from Site (m)	Approximate Walk Time (mins)	Approximate Cycle Time (mins)
Public Transport			
Wood Street Bus Stops	8	0	0
Cardiff Central Bus Interchange	160	3	1
Cardiff Central Station	170	4	1
Cardiff Queen Street Station	1,060	13	4
Education			
Cardiff University School of Journalism Media and Culture	50	1	0

Local Facility/Amenity*	Approximate Distance from Site (m)	Approximate Walk Time (mins)	Approximate Cycle Time (mins)
WE Bridge Academy (English Language School)	120	1	<1
Attaqwa Arabic School	398	5	1
The Open University Cardiff	496	6	2
Riverside Islamic School	534	6	2
CAVC Creative Arts Academy	775	9	3
The Cardiff Academy	779	9	3
The Greek School of Wales	970	13	4
St Mary's The Virgin Church in Wales Primary School	970	13	4
St Cuthbert's Roman Catholic Primary School	1,420	17	5
Kitchener Primary School	1,470	18	6
Fitzalan High School	2,500	35	10
Cardiff University (University Students Union)	1,600	24	6
University of South Wales	970	13	4
Health			
Hywel Samuel Golate (Dental Clinic)	362	4	1
Mydentist, Quay Street	560	7	2
Luna Dental	920	11	3
Cardiff Dental and Aesthetics Centre	972	12	4
Riverside Health Centre	1,260	15	5
St Davids Hospital	1,320	16	5
Bupa Dental Care Canton	1,360	16	5
St Davids Court Surgery	1,390	17	5
Meddygfa Canna Surgery	1,560	19	6
Park Place Surgery	1,450	20	6
The Royal Infirmary	1,000	24	4
Shopping / Leisure			
PureGym Cardiff Central	100	1	1
Vue Cinema	100	1	1
Disco Bowl	100	1	1
Pret a Manger	172	2	<1
Boots Pharmacy	180	2	<1
St Marys Shopping / Leisure Facilities	200 - 500	2-6	1-2
Tesco Express (Central Square)	220	3	1

Local Facility/Amenity*	Approximate Distance from Site (m)	Approximate Walk Time (mins)	Approximate Cycle Time (mins)
Royal Arcade Shopping / Leisure Facilities	235	2.8	1
Morgan Arcade Shopping / Leisure Facilities	271	3	1
Tesco Express (St Marys)	327	4	1
John Lewis	535	6	2
St David's Shopping Centre	800	10	3
Bute Park	800	10	3
Cardiff Castle	886	11	3

*Please note, due to the highly central location of the site, there are a high number of local facilities and amenities located nearby. This table highlights a select number of facilities / amenities.

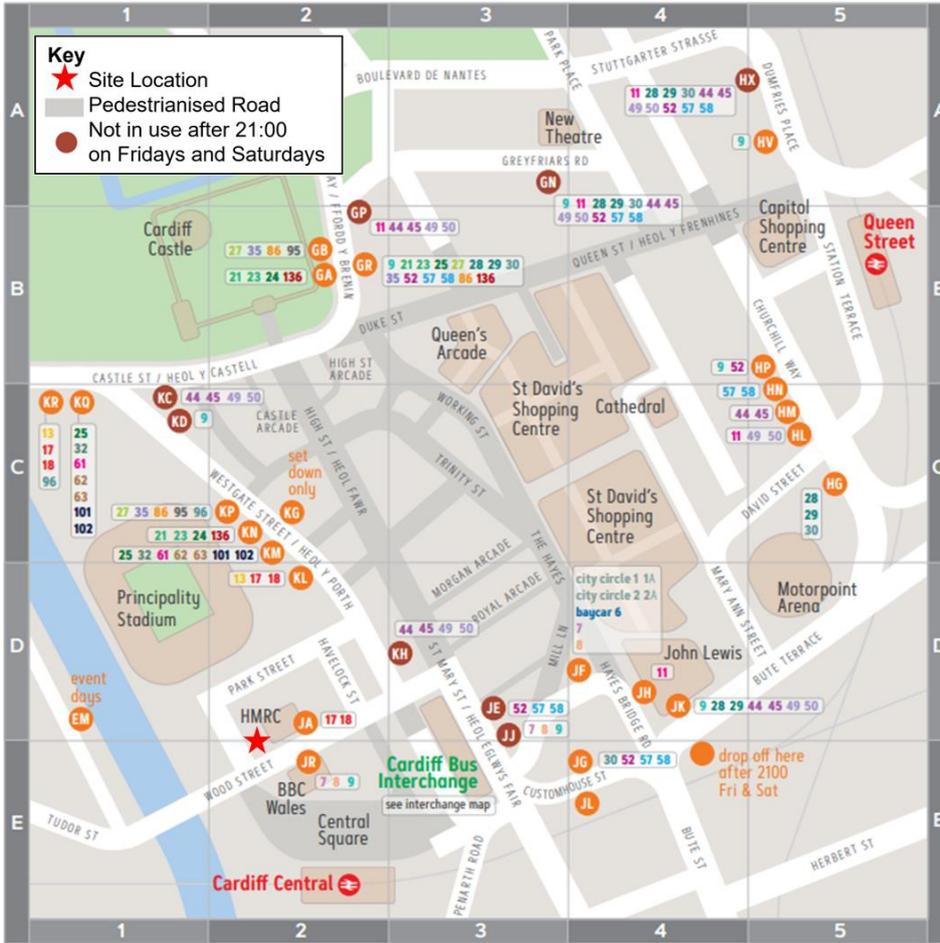
- 3.5.40. As shown in **Table 3-3**, the site is within suitable walking and cycling distance of many key amenities including public transport destinations, helping to promote the use of sustainable transport to travel to/from the site.
- 3.5.41. Additionally, all educational centres are located within preferred maximum from the development site apart from Fitzalan High School which may require alternative methods of transportation. However, due to the site's proximity to nearby public transport stops, it increases the access for educational sites that may located further than the preferred maximum distance of 2,000m.
- 3.5.42. The site is also within the preferred maximum distance of health, shopping and leisure amenities.
- 3.5.43. Overall, it can be concluded that the proposed development site is located within a highly accessible location and supports the use of sustainable transport to access many key local amenities.

PUBLIC TRANSPORT

Bus Transport

- 3.5.44. The site is located within close proximity to multiple bus services, a detailed map showing the bus services accessible within close proximity of the site is presented in **Figure 3-19**. Whilst a map presenting all bus services and destinations in and around Cardiff City Centre has been provided in Appendix B.

Figure 3-19 - Cardiff Central Bus Services Map



Source: <https://images.cardiffbus.com/2025-01/Where%20to%20catch%20your%20bus%20City%20Centre%20Jan%202025.pdf>
 [Accessed: February 2025]

3.5.45. As shown in **Figure 3-19**, the closest bus stops to the site are located on Wood Street, providing access to services 17, 18, 7, 8 and 9. The bus stops on Wood Street are sheltered, provide seating and real time bus information as pictured in **Figure 3-20**.

Figure 3-20 - Wood Street Bus Stop



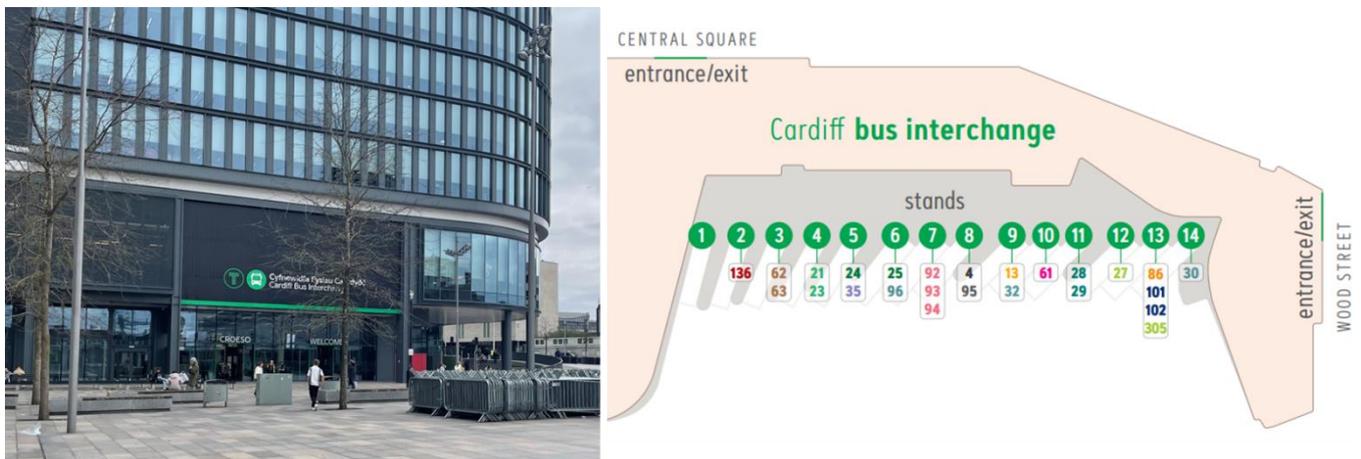
3.5.46. The services accessible via Wood Street (to the south of the site) travel to/from Ely, Canton, Penarth, Cardiff Bay and the Sports Village, the frequencies of these services are presented in **Table 3-4** below.

Table 3-4 – Wood Street Bus Services

Service	Route	Monday to Friday Frequencies	Saturday Frequencies	Sunday Frequencies
7	City Centre – Penarth	Hourly	No Services	No Services
8	City Centre – Cardiff Bay	Hourly	Hourly	No Services
9	City Centre – Sports Village	Every 15 minutes	Half Hourly	Hourly
17/18	Ely – Caerau – City Centre	Every 5-10 minutes	Every 5-10 minutes	Every 20 minutes

3.5.47. Further bus services can be accessed by the Cardiff Central Bus Interchange, which is located approximately 160m south-west of the site. Cardiff Central Bus Interchange and the services it provides are presented in **Figure 3-21**.

Figure 3-21 - Cardiff Central Bus Interchange



3.5.48. The bus services accessible from the Cardiff Central Bus Interchange to/from Cardiff Central Bus Interchange provide frequent services to/from key destinations in and around Cardiff such as Pentrych, Radyr, Rhiwbina, Heath Hospital and Leckwith. The high frequency of these services would make it an attractive option for residents when travelling to key destinations located in and around Cardiff.

Rail Transport

3.5.49. The closest railway station to the site is Cardiff Central Station (shown in **Figure 3-22**) which is located approximately 170m (2-minute walk) to the south of the site.

Figure 3-22 - Cardiff Central Station

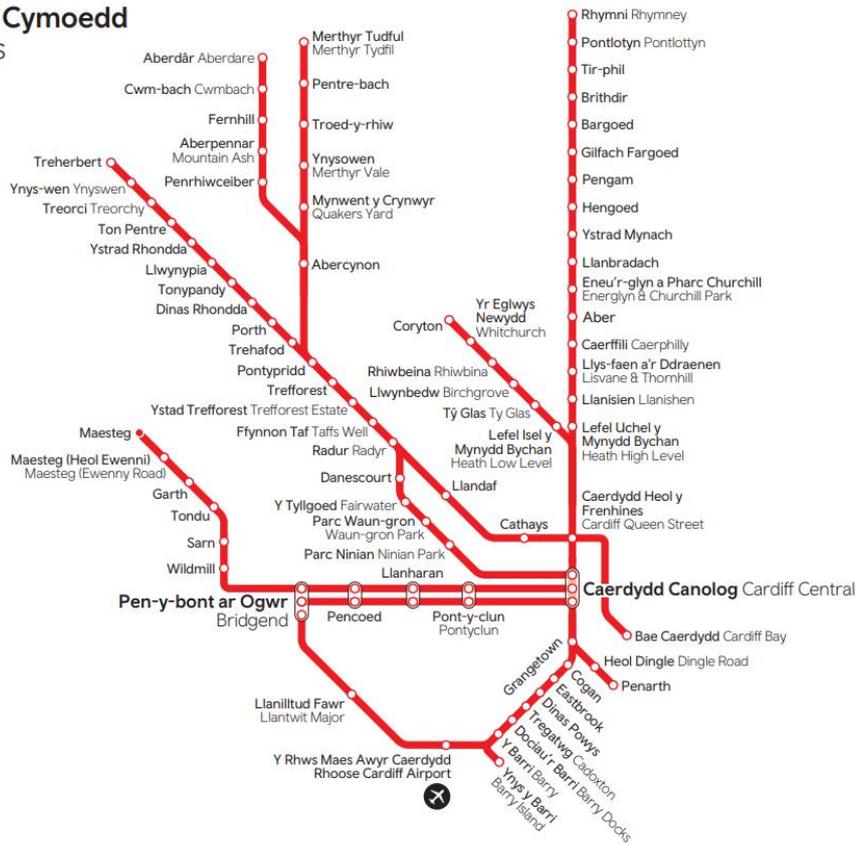


- 3.5.50. The station hosts eight step-free platforms, ticket machines, toilets, waiting areas and a number of shops. The station also provides a total of 156 sheltered cycle parking spaces with CCTV.
- 3.5.51. Cardiff Central Station is a major station as part of the South Wales Metro project which has been ongoing since August 2020, to provide more reliable and frequent services in south Wales¹⁰. As part of the project, improvements have been made to the Core Valley Lines and allow for frequent and reliable rail access to locations such as Rhymney, Merthyr Tydfil, Treherbert and Maesteg. A map of the Core Valley Lines is presented in **Figure 3-23**.

¹⁰ <https://tfw.wales/projects/metro/south-wales-metro>

Figure 3-23 - South Wales Metro Rail Map

Llinellau'r Cymoedd
Valley Lines



Source: TfW

3.5.52. The station also provides services to other major national stations including:

- Manchester Piccadilly;
- Bristol Temple Meads;
- Newport;
- Swindon;
- Reading; and,
- London Paddington.

3.5.53. In addition to the South Wales Metro Project, proposals for the station also include Cardiff Crossrail which proposes a tramway between Cardiff Central and Cardiff Bay. A public consultation for this scheme was held in Autumn 2024¹¹.

¹¹ <https://tfw.wales/projects/metro/south-wales-metro/cardiff-crossrail>

- 3.5.54. Furthermore, it is proposed that a Metro Central¹² will be provided in Cardiff, which includes enhancements to Cardiff Central Station (currently undergoing public consultation¹³), the provision of the recently built Cardiff Bus Interchange and improved cycle spaces (as mentioned in paragraph 3.5.36).
- 3.5.55. Due to the frequency of existing services, accessibility in relation to the site and the proposed future improvements, travelling by rail is likely to be a well-selected choice for residents and visitors to the site.

3.6 LOCAL HIGHWAY NETWORK

- 3.6.1. This chapter provides a description of the baseline highway conditions in the vicinity of the site, including a review of the local highway network, parking locations and a review of the highway safety.

Wood Street

- 3.6.2. Wood Street is located adjacent to the south of the site and consists of one lane in each direction (as shown in **Figure 3-24**). Wood Street connects to Tudor Street to the west via Wood Street Bridge and St Mary Street to the east, it is subject to a 20mph speed limit.

Figure 3-24 - Wood Street



Park Street

- 3.6.3. Park Street is located to the north of the site and is one-way in an eastbound direction, it forms a junction with Westgate Street to the east as shown in **Figure 3-10**.

¹² <https://tfw.wales/projects/metro/south-wales-metro/metro-central>

¹³ <https://tfw.wales/projects/cardiff-central-enhancements>

Havelock Street

3.6.4. Havelock Street is located to the east of the site and is one-way in a southbound direction Havelock Street connects to Wood Street to the south as shown in **Figure 3-11**.

Scott Road

3.6.5. Scott Road is located adjacent to the west of the proposed development and connects to Wood Street in the south and Park Street to the north. The road is subject to a northbound one-way system and can be seen in **Figure 3-6**.

Westgate Street

3.6.6. Westgate Street is located to the east of the site and is part of the key bus route in Cardiff, to the south of its junction with Park Street the road operates as a bus gate and movements for private vehicles are banned. To the north of its junction with Park Street, the road allows for northbound movements for general vehicles and southbound movements for buses only until its junction with Guildhall Place where the road allows for two-way movements by all motor vehicles. **Figure 3-25** shows the carriageway provision on Westgate Street.

Figure 3-25 - Westgate Street



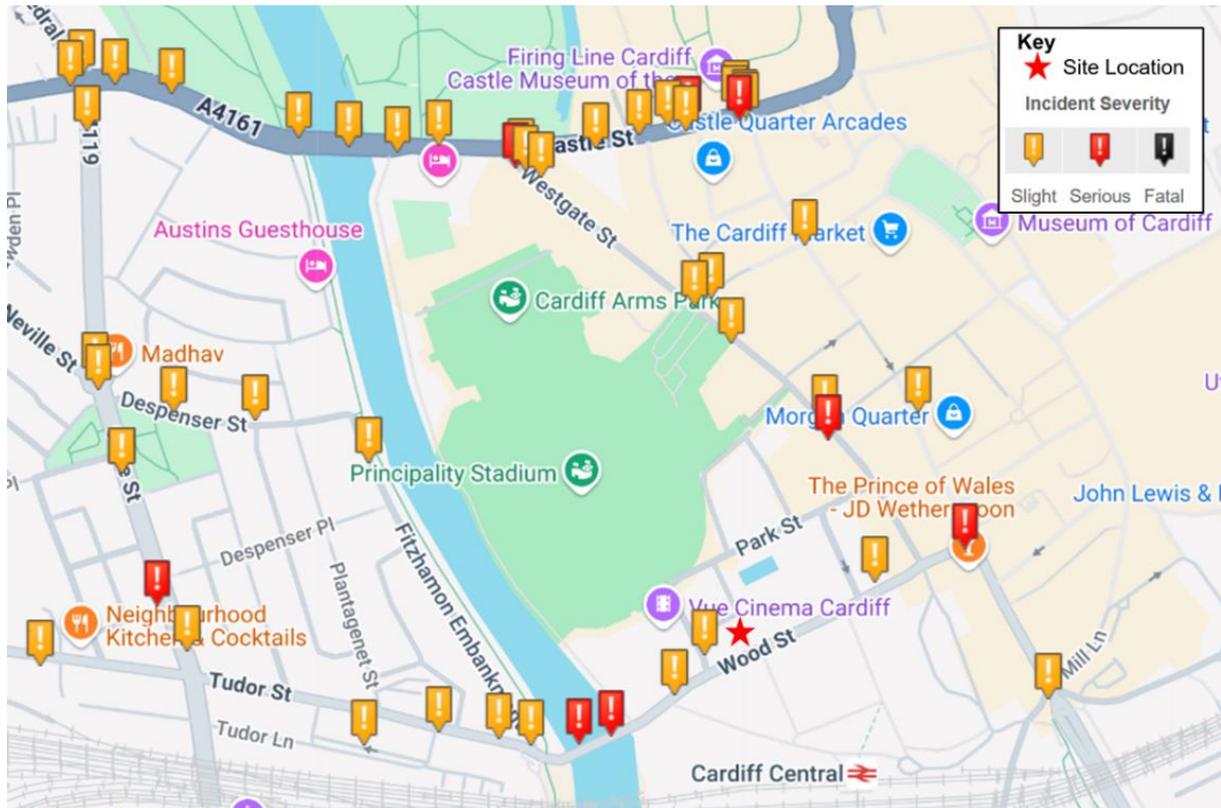
St Mary Street

3.6.7. St Mary Street is located to the east of site, from Wood Street, St Mary Street can only be accessed by vehicles travelling southbound as St Mary Street is pedestrianised to the north of this point. St Mary Street in the southbound direction is closed to all traffic flow Friday and Saturday from 10pm onwards to allow for pedestrian movements to/from nightclubs and bars in the area. This closure also applies whenever major events take place in the Principality Stadium.

HIGHWAY SAFETY

3.6.8. To assess highway safety in the surrounding vicinity of the proposed development site CrashMap has been interrogated to obtain Personal Injury Collision (PIC) data. The data was collected within the most recently available five-year period 2019-2023 for the area highlighted in **Figure 3-26**.

Figure 3-26 - Personal Injury Collisions within the Vicinity of the Site



3.6.9. **Table 3-5** provides a summary of the number and severity of collisions that have occurred within the vicinity of the site.

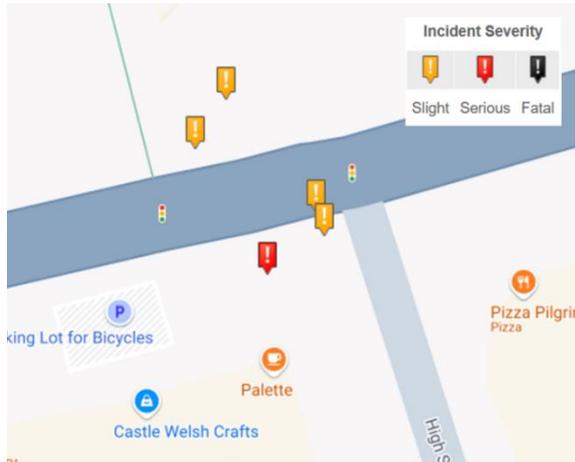
Table 3-5 - Collisions and (Casualties) within the Vicinity of the Site

Casualty Type	Year					Total
	2019	2020	2021	2022	2023	
Fatal	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
Serious	4(4)	0(0)	1(1)	1(1)	1(2)	7(8)
Slight	12(13)	8(10)	6(8)	7(10)	8(8)	41(49)
Total	16(17)	8(10)	7(9)	8(11)	9(10)	48(57)

3.6.10. **Table 3-5** shows that within the most recently available five-year period a total of 48 collisions occurred within the vicinity of the site, resulting in 57 casualties. 41 of the collisions were slight severity (resulting in 49 casualties), seven were serious severity (resulting in eight casualties) and no fatal collisions occurred.

3.6.11. Through an analysis of the collisions, one collision cluster was identified based on the definition ‘where four PICs have occurred in three years within a 50m radius’, the collision cluster located on Duke Street has been presented in **Figure 3-27**. In total in this location, five collisions occurred between 2019 and 2022 resulting in five casualties (one of which was serious).

Figure 3-27 - Duke Street Cluster Site



3.6.12. A review of the collision that involved non-motorised users (NMUs), classified by either a pedestrian casualty or pedal cycle casualty has been provided in **Table 3-6** below. The table shows that in total, 75% of the total collisions within the vicinity of the site involved NMUs, likely due to the nature of the site being within the city centre.

Table 3-6 – Non-Motorised User Collisions and (Casualties) within the Vicinity of the Site

Casualty Type	Year					Total
	2019	2020	2021	2022	2023	
Fatal	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
Serious	4(4)	0(0)	0(0)	2(2)	0(0)	6(6)
Slight	8(9)	4(4)	6(8)	5(5)	7(8)	30(34)
Total	12(13)	4(4)	6(8)	7(7)	7(8)	36(40)

3.6.13. Due to the nature of the proposals providing for a car-free development, it is not expected that the proposals will negatively impact the highway safety of the local highway network surrounding the site.

3.7 SUMMARY

3.7.1. The site is located within the city centre of Cardiff, within the Cardiff Central Square Masterplan area, which has led to the transformation of the area in and around Cardiff Central Station.

3.7.2. The site is surrounded by high quality active travel infrastructure, that helps connect the site to the wider city centre area. Directly to the south of the site, Wood Street provides access to a footway, segregated cycle lane and bus stops.

3.7.3. The site also benefits from high quality public transport connections, with bus stops provided on Wood Street adjacent to the south of the site, the Cardiff Central Bus Interchange located approximately 160m to the southwest of the site and Cardiff Central Station located approximately 170m to the south of the site.

3.7.4. From the established baseline conditions, the surrounding area has a well-established network of pedestrian, cycle and highway network. The central location of the site makes it readily accessible to surrounding key amenities, alongside the surrounding public transport network (both bus and rail).

4 PROPOSED DEVELOPMENT

4.1 OVERVIEW

4.1.1. This section sites out the details of the proposed development, the description of the proposed development is as follows:

“Mixed-use development to provide residential accommodation, flexible non-residential uses, cycle parking, landscaping and other associated works”

4.2 EXTANT PLANNING PERMISSION

4.2.1. The site benefits from full planning permission for the following development (Ref: 21/02984/MJR), which was granted by the Council on 2nd May 2024:

‘Full planning application for a mixed-use building providing commercial uses at ground floor/mezzanine level (Use Classes A1/A2/A3/B1/D1/D2) and residential accommodation above (Use Class C3 and including non C3 Use Class residential), a pavilion (Use Classes A1/A2/A3), public realm, cycle parking, access, drainage and other infrastructure works required for the delivery of Central Square Plots 4 and 5.’

4.2.2. Within the existing planning permission granted in 2024, the proposals included 332 apartments and 32 serviced apartments, two ground floor commercial units, pavilion, refuse storage, bike storage, landscaping, public realm and ancillary works.

4.2.3. Due to the highly sustainable location, the development is proposed to be car-free. In relation to cycle parking, the existing permission included 484 cycle parking spaces, consisting of 364 residential two-tier racks and Sheffield stands within the tower building, situated across two bike stores on the mezzanine / Level 1 and accessed from Scott Road via a dedicated lift. Out of the 364 spaces proposed, 20 were ‘accessible’ Sheffield hoops (which equates to 5.5% of the total). An additional 120 Sheffield cycle stand spaces are provided externally in 3 blocks of 40, to the rear of the pavilion building.

4.2.4. As a result of the close proximity of the tower to the nearby transport links and city centre, it was agreed that the number of required cycle parking spaces could be reduced to 64% of the SPG requirement of 1 space per bedroom. It is understood that the 64% SPG requirement provides a ratio of one cycle space per proposed apartment.

4.2.5. It is understood that the Local Highway Authority Transport Officer raised no objection to the application, subject to a number of conditions relating to cycle parking details, public realm works and a Construction Environmental Management Plan (CEMP).

4.3 PROPOSED DEVELOPMENT

4.3.1. A summary of the development proposals is as follows:

- A landmark 50 storey building with a maximum height of up to 177.85m Above Ordnance Datum (AOD);
- 528 new homes (Class C3) comprising a mix of 1-bed and 2-beds;
- A pavilion building within Central Square comprising up to 601sqm of flexible non-residential floorspace (flexible Class A1 and A3);

- 2,856.5sqm of high quality internal and external amenity space through provision of roof terraces, lounges, coworking, gym and other wellbeing spaces;
- A basement level providing ancillary residential floorspace; and,
- A car-free development with 528 cycle parking spaces within proposed building, including 5% accessible spaces, and a publicly accessible, state of the art bike hub and café. Additionally, 52 public cycle spaces are provided within adjacent square provided as Sheffield stands.

4.3.2. As stated in Chapter 1, the proposals provide the opportunity to make a significant positive contribution to the ongoing regeneration within the Central Square area of the city centre, which aims to showcase the best that Cardiff has to offer. The Applicant is fully committed to the delivery of the site, and it is their ambition to create a new iconic landmark for Cardiff and Wales.

4.3.3. As well as the delivery of much needed high-quality homes to address Cardiff Council’s housing need, the proposed development brings with it a wide range of enhanced planning and public benefits. The benefits include the delivery of a strategically important city Centre site, new flexible non-residential floorspace that will activate Central Square, a publicly accessible bike hub and cafe, a new pavilion building that can accommodate a restaurant, extensive public realm landscaping in and around the buildings, highly sustainable and energy efficient buildings, and other significant economic and social benefits for the city.

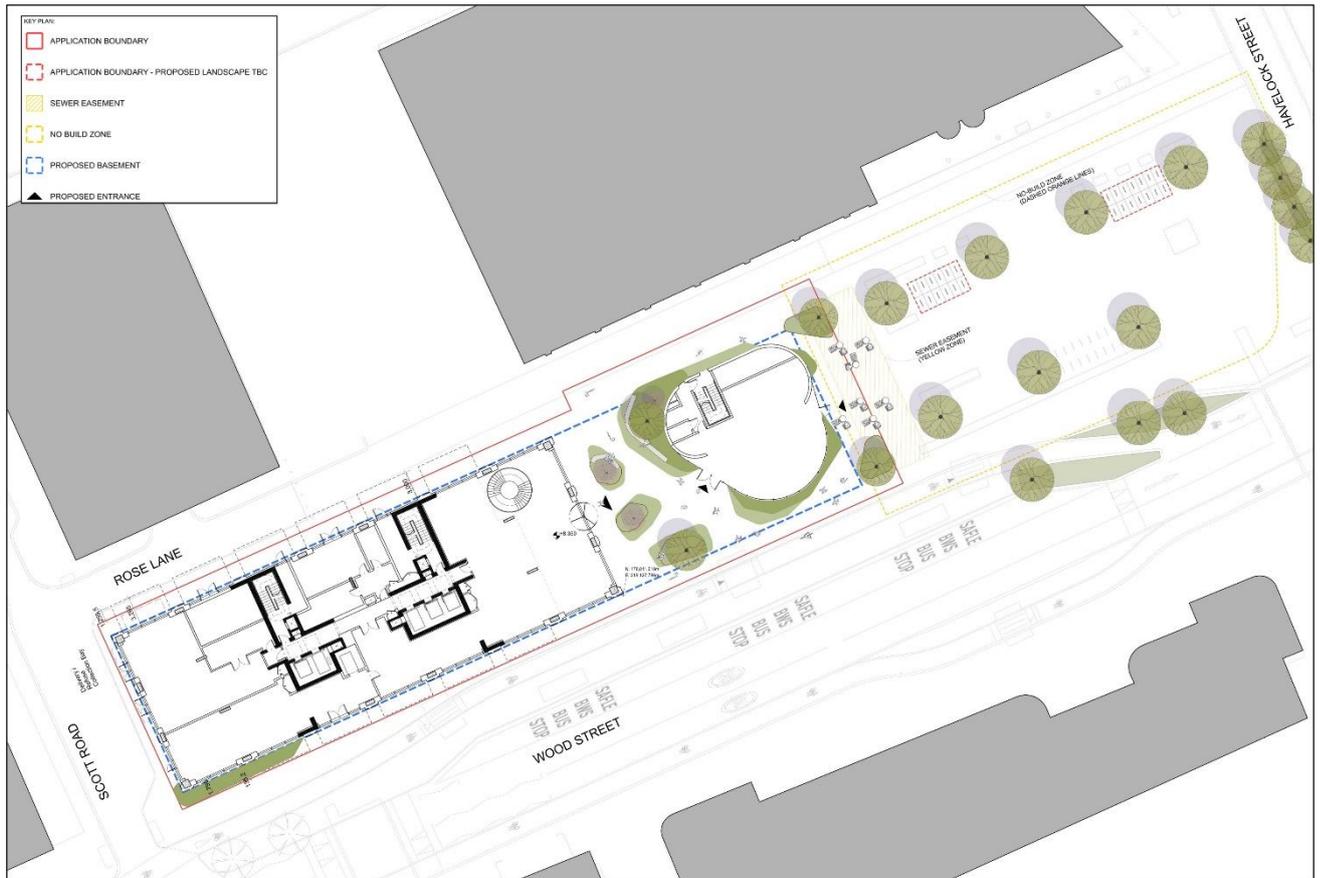
4.3.4. A summary of the proposed floorspace for the proposed development is provided in **Table 4-1**.

Table 4-1 – Proposed Floor Space

Use Class	Proposed Floorspace (sqm) (GIA)
Class A1 and A3 - Flexible Non-residential	601.5
Class C3 – Residential	45,180.5
Sui Generis – Bike Hub	115
Total	45,897

4.3.5. General arrangement plans for the proposed development are provided in Appendix D, whilst a general site layout has been presented in **Figure 4-1**.

Figure 4-1 - Proposed Site Layout



4.4 SITE ACCESS ARRANGEMENTS

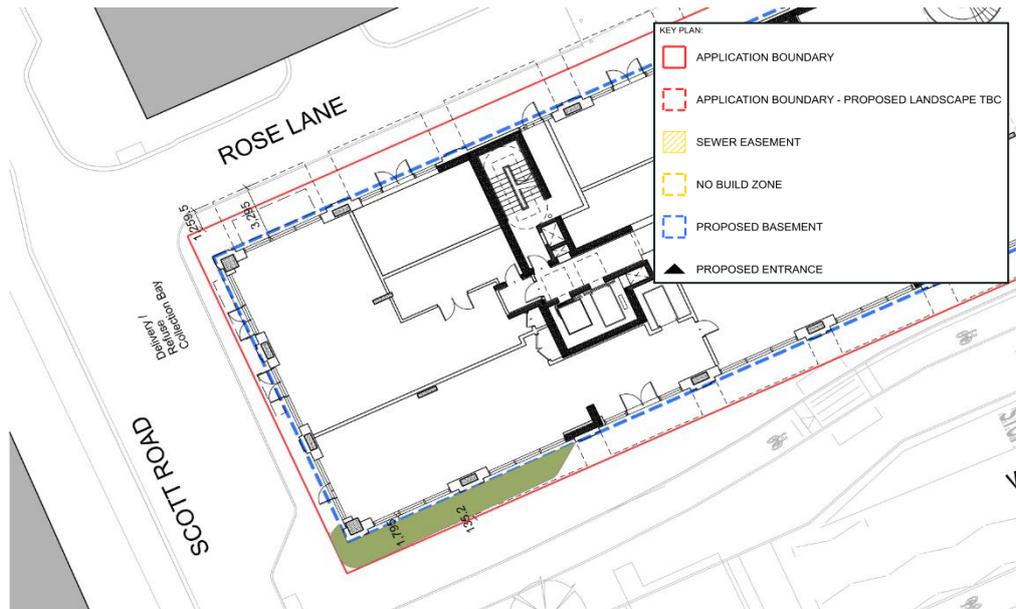
- 4.4.1. As presented in Chapter 3, the site is located within Cardiff City Centre and is well connected to the existing active travel and public transport infrastructure, making the site highly sustainable. The site has been designed to complement the use of sustainable transport modes, with no vehicular access provided.
- 4.4.2. As shown in **Figure 4-1**, it is proposed that the area between the tower and pavilion will be pedestrianised, providing direct access to the site from the existing active travel infrastructure on Wood Street and the already pedestrianised area adjacent to the HMRC building, providing a significant betterment to the public realm.
- 4.4.3. Access for pedestrians to the tower and pavilion will be provided through the abovementioned pedestrianised area directly connected to the footway located on Wood Street, within close proximity to an existing pedestrian crossing located on Wood Street. As such, providing direct access to the site from Cardiff Central Station and Cardiff Central Bus Interchange. In addition, also providing direct access from the site to the bus stops located on Wood Street.
- 4.4.4. Furthermore, access to the pavilion will also be provided to pedestrians to the east of the site from the existing pedestrianised area to the south of the HMRC building.
- 4.4.5. Access to the site via cycle will be provided directly adjacent to Wood Street where cyclists will be directed through to the state-of-the-art bike hub and café, which is described in more detail within this chapter. Furthermore, cyclists will also be able to access the site towards the pedestrianised area to

the south of the HMRC building where proposals include for the provision of 52 outdoor cycle spaces in the form of Sheffield stands, as described further below.

4.5 SERVICING AND DELIVERIES

4.5.1. The service access to the building is on Scott Road where it is proposed that a delivery / refuse collection bay will be provided as shown in **Figure 4-2**, consistent with the previously consented scheme.

Figure 4-2 - Proposed Delivery / Refuse Collection Bay



4.5.2. The existing layout on Scott Road is presented in **Figure 4-3**, it shows that there is currently a one-way system in place on Scott Road, with vehicles able to access Scott Road via Wood Street travelling northbound, exiting Scott Road onto Havelock Street in a southbound direction back onto Wood Street.

Figure 4-3 - Scott Road Existing Layout



- 4.5.3. It is proposed that all service and delivery activities (such as post, courier and food deliveries) will be undertaken via the collection bay.
- 4.5.4. The collection bay is directly adjacent to the indoor bin store area to provide direct access for refuse collection, which is proposed to be undertaken by a private refuse collection company 2-3 times a week.
- 4.5.5. Any other deliveries to the tower / pavilion will be undertaken outside of network peak hours.

4.6 EMERGENCY ACCESS

- 4.6.1. Emergency access to the site will be provided via Scott Road through the proposed collection bay or via Rose Lane, directly adjacent to the north of the site.

4.7 PARKING PROVISION

Cycle Parking

- 4.7.1. As previously stated, due to the highly sustainable location, the site has been designed to complement the use of sustainable transport modes, with no vehicular access provided, as such, the proposed development will be car-free and no vehicular parking will be provided.
- 4.7.2. As presented in **Table 2-2**, Cardiff Council's Managing Transportation Impacts SPG requires the provision of one cycle parking space per bedroom for residential buildings. However, as described in Section 4.2, as part of the existing planning permission held by the site (Ref: 21/02984/MJR), it was agreed with Cardiff Council that the number of required cycle parking spaces could be reduced to 64% of the SPG requirement, resulting in a ratio of one cycle space per proposed apartment. As such, the proposed development is proposed to provide a total of 528 internal cycle parking spaces, equivalent to one cycle space per apartment as previously agreed.
- 4.7.3. The proposals include the provision of 101 cycle parking spaces accessible via the ground floor, made up of 61 two-tier Sheffield stand spaces, 16 accessible Sheffield spaces and 24 Brompton Bike lockers. Additionally, a further 309 two-tier Sheffield stand spaces, 10 accessible Sheffield spaces and 108 Brompton Bike lockers will be provided on the mezzanine level. In total, the internal cycle parking proposals will be made up as follows:
 - 370 two tier Sheffield cycle parking spaces;
 - 132 Brompton Bike lockers; and,
 - 26 accessible Sheffield stand spaces.
- 4.7.4. In line with policy requirements, it is proposed that 5% of the total internal cycle parking provision (26) will be accessible Sheffield stand spaces.
- 4.7.5. With consideration of the highly sustainable location of the site and connections to the public transport network, it is likely to assume that cyclists also travelling by public transport would favour the use of a foldable Brompton Bike which allows commuters to more easily travel via public transport when compared to a traditional bike. As such, 25% (132) of the internal cycle spaces have been allocated as Brompton Bike lockers.
- 4.7.6. External to the tower, the proposals include for the provision of 52 additional cycle parking spaces located within the pedestrianised area to the south of the HMRC building in the form of Sheffield stands. These Sheffield stands will be publicly accessible and will support the existing cycle spaces available within the public realm (as shown in **Figure 3-16**).

Bike Hub

- 4.7.7. Based on the central location of the site, its high walkability, the existing modal share of cyclists in the area (7.7%) and the existing utilisation of cycle parking surrounding the site (presented in Section 3.5), it is likely that cycle ownership may be low and that the proposed cycle parking may provide an over provision. To avoid having unused provision, it is proposed that a bespoke, state-of-the-art bike hub will be provided.
- 4.7.8. The bike hub is proposed to be a first of a kind in Cardiff, providing secure, high security cycle parking spaces with staff. In addition to cycle parking spaces, it is proposed that the bike hub will provide a café and a bike maintenance and repair service. The bike hub is proposed to be self-funded, with members of the public paying a fee to keep their bike in the secure parking area.
- 4.7.9. To ensure that the residents of the tower have primary access to the cycle parking spaces provided within the building, residents will have first access to the cycle parking spaces, with them being required to register for a space. Any unused spaces will be rented out as part of the bike hub.
- 4.7.10. The proposed bike hub is a new and innovative and is proposed to compliment the proposed cycle parking improvements being undertaken by Cardiff Council (described in Section 3.5) by providing secure cycle parking provision in the heart of the city centre. The bike hub is expected to promote the use of cycling in the city by providing high-quality, secure cycle parking spaces where members of the public will be confident leaving their bikes, aiding Cardiff Council's modal shift targets.
- 4.7.11. A review of the existing cycle parking provision surrounding the site (presented in Section 3.5), found that there is a reduction in utilisation of the spaces after normal working hours, suggesting that the cycle parking spaces are utilised by commuters within the city centre. However, it also found that the cycle parking spaces are not 100% utilised, with the assessment finding that 27% of spaces are occupied in the peak hours and 19% occupied in the evening. From this assessment, it is reasonable to assume that not all of the parking spaces provided within the development will be utilised by residents, as such, highlighting the requirement for the bike hub.
- 4.7.12. As presented in Section 3.5, Cardiff Council are funding more secure cycle parking provision across the city, it is proposed that the bike hub will compliment this and offer more secure cycle parking spaces in the city centre.
- 4.7.13. Furthermore, the provision of Brompton Bike storage lockers may further promote the use of the Brompton Bike hire location at Cardiff Central by providing a secure parking space for the hired bike.
- 4.7.14. The provision of a cycle repair and maintenance service within an accessible location in the centre of Cardiff is also expected to further promote the use of cycling in the city.

5 TRIP GENERATION

5.1 OVERVIEW

5.1.1. This chapter presents the traffic generation associated with the development proposals, including both the residential and commercial aspects of the proposed development.

5.2 PROPOSED DEVELOPMENT TRIP GENERATION

5.2.1. As previously stated, the proposed development is proposed to be car-free and does not provide any car parking spaces or vehicle facilities, apart from a delivery / collection bay located on Scott Road (as consistent with the previous scheme). The city centre itself does provide a number of car parking facilities; however, these are often fully utilised and due to their associated high costs, it is envisaged that the future residents will not own cars. Additionally, due to the sites highly sustainable location, residents, staff and visitors of the development will be able to travel to/from the development and key facilities / amenities via sustainable transport modes, without the need of a private car. As such, it is envisaged that the development will not generate any car trips, other than infrequent off-peak trips for deliveries and refuse collection.

5.2.2. The trips estimated to be generated by the proposed development have been assessed in relation to all multi-modal trips, based on the categories presented in the 2021 Census (**Table 3-1**) not including private car travel which has been discounted due to the car-free nature of the development. The multi-modal trip assessment includes rail, bus, taxi and active travel modes of transport.

RESIDENTIAL

5.2.3. To understand the likely number of trips that the residential aspect of the proposed development could generate, the TRICs database (version 7.11.4) has been interrogated for similar sites. In selecting relevant comparable sites, the following parameters have been applied:

- 'Residential – Flats Privately Owned' Category;
- Sites within the UK (excluding Ireland and Northern Ireland);
- 'Town Centre' location;
- Between 46 and 194 units (actual range);
- Manual count surveys undertaken Monday to Friday;
- Surveys which were undertaken within the last 10 years;
- Population within 1 mile 25,001 and 100,000; and,
- Population within 5 miles 250,001 and >500,001.

5.2.4. In accordance with the above selection criteria, three comparable sites have been selected from the TRICs database. Total person trip rates derived from TRICs for the weekday AM and PM peak periods are set out in **Table 5-1**, whilst a full TRICs report, which includes details of the selected sites is included in Appendix E.

Table 5-1 – TRICs Person Trip Rates Residential

Time Period	Arrival		Departure		Total Trips	
	Trip Rate (per dwelling)	No. of Person Trips*	Trip Rate (per dwelling)	No. of Person Trips*	Trip Rate (per dwelling)	No. of Person Trips*
AM Peak (08:00-09:00)	0.083	44	0.515	272	0.598	316
PM Peak (17:00-18:00)	0.253	134	0.11	58	0.363	192

*Based on 528 apartments.

5.2.5. The estimated person trip rates extracted from TRICs, as presented in **Table 5-1**, have been applied to the modal share data sourced from the 2021 Census. To ensure an accurate assessment, the modal share data has been adjusted to account for the car-free nature of the development. The resultant proposed multi-modal residential trip generation for the AM and PM peak periods is presented in **Table 5-2**.

Table 5-2 – Multi-Modal Proposed Residential Peak Hour Trip Generation

Method of Travel to Workplace	MSOA Site Area (Cardiff 032)*		AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	2021 Census	Adjusted for Car-Free Development	Arrivals	Departures	Arrival	Departures
Underground, metro, light rail, tram	0.1%	0.2%	0	0	0	0
Train	4.7%	8.0%	3	22	11	5
Bus, minibus or coach	7.5%	12.7%	6	35	17	7
Taxi	1.1%	1.9%	1	5	2	1
Motorcycle, scooter or moped	0.3%	0.0%	0	0	0	0
Driving a car or van	36.3%	0.0%	0	0	0	0
Passenger in a car or van	4.3%	0.0%	0	0	0	0
Bicycle	7.7%	13.1%	6	35	17	8
On foot	36.5%	61.9%	27	168	83	36
Other method of travel to work	1.4%	2.4%	1	6	3	1

*Any errors due to rounding.

5.2.6. As shown in **Table 5-1**, the residential aspect of the proposed development is estimated to generate 316 total number trips in the AM peak period and 192 total trips in the PM peak period. When

considering the multi-modal trip generation (presented in **Table 5-2**), it is estimate that the majority of the generated trips will be made by active travel modes, supported by the high quality existing active travel infrastructure in the city centre.

COMMERCIAL

5.2.7. The proposed pavilion building comprises of 601sqm of commercial space, that is proposed to host a restaurant. To understand the likely number of trips that the pavilion of the proposed development could generate, the TRICs database (version 7.11.4) has been interrogated for similar sites. In selecting relevant comparable sites, the following parameters have been applied:

- 'Hotel, Food and Drinks – Restaurants' Category;
- Sites within the UK (excluding Ireland and Northern Ireland);
- 'Town Centre' location;
- Between 220 and 637 sqm (actual range);
- Manual count surveys undertaken Monday to Friday;
- Surveys which were undertaken within the last 10 years;
- Population within 1 mile 25,001 and 100,000; and,
- Population within 5 miles 125,001 and >500,001.

5.2.8. In accordance with the above selection criteria, seven comparable sites have been selected from the TRICs database. Noting the future potential opening times of a restaurant on the proposed development site, it is not expected that the restaurant will generate any trips in the AM peak period. It is also acknowledged that some trips to/from the restaurant may be internalised, originating from the tower.

5.2.9. Total person trip rates derived from TRICs for the weekday AM and PM peak periods are set out in **Table 5-3**, whilst a full TRICs report, which includes details of the selected sites is included in Appendix E.

Table 5-3 - TRICs Person Trip Rates Commercial

Time Period	Arrival		Departure		Total Trips	
	Trip Rate (per 100sqm)	No. of Person Trips*	Trip Rate (per 100 sqm)	No. of Person Trips*	Trip Rate (per 100 sqm)	No. of Person Trips*
AM Peak (08:00-09:00)	0.00	0	0.00	0	0.00	0
PM Peak (17:00-18:00)	8.35	50	5.69	34	14.04	84

*Based on 601sqm of commercial space

5.2.10. The estimated person trip rates extracted from TRICs, as presented in **Table 5-3**, have been applied to the modal share data sourced from the 2021 Census. To ensure an accurate assessment, the modal share data has been adjusted to account for the car-free nature of the development. The resultant proposed multi-modal residential trip generation for the AM and PM peak periods is presented in **Table 5-4**.

Table 5-4 - Multi-Modal Proposed Commercial Peak Hour Trip Generation

Method of Travel to Workplace	MSOA Site Area (Cardiff 032)*		AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	2021 Census	Adjusted for Car-Free Development	Arrivals	Departures	Arrival	Departures
Underground, metro, light rail, tram	0.1%	0.2%	0	0	0	0
Train	4.7%	8.0%	0	0	4	3
Bus, minibus or coach	7.5%	12.7%	0	0	6	4
Taxi	1.1%	1.9%	0	0	1	1
Motorcycle, scooter or moped	0.3%	0.0%	0	0	0	0
Driving a car or van	36.3%	0.0%	0	0	0	0
Passenger in a car or van	4.3%	0.0%	0	0	0	0
Bicycle	7.7%	13.1%	0	0	7	4
On foot	36.5%	61.9%	0	0	31	21
Other method of travel to work	1.4%	2.4%	0	0	1	1

*Any errors due to rounding.

- 5.2.11. As shown in **Table 5-3**, the pavilion is estimated to generate 0 trips in the AM peak period and 84 trips in the PM peak period. When considering the multi-modal trip generation (presented in **Table 5-4**), it is estimated that the majority of the generated trips will be made by active travel modes, supported by the high quality existing active travel infrastructure in the city centre.
- 5.2.12. In relation to the proposed bike hub, as previously stated, residents of the tower will have primary access to the cycle parking spaces provided, with them being required to register for a space, any unused spaces will be rented out as part of the bike hub to ensure the most efficient use of spaces provided. It is anticipated that any trips to/from the bike hub will be made via cycle due to the purpose and nature of the hub. It is also acknowledged that there may be ancillary deliveries associated with the maintenance and repair service, however, these would be made via the proposed loading / collection bay on Scott Road and will be scheduled outside of network peak hours. The utilisation of the bike hub will be strictly monitored and shared as part of the annual monitoring reports undertaken in line with the FTP.

TOTAL PROPOSED DEVELOPMENT TRIP GENERATION

- 5.2.13. When considering the development as a whole, it is estimated that the proposed development is expected to generate a total of 316 trips in the AM peak period and 276 in the PM peak period. The multi-modal trip generation for the development as a whole is presented in **Table 5-5** below.

Table 5-5 – Total Proposed Development Multi-Modal Trip Generation

Method of Travel to Workplace	MSOA Site Area (Cardiff 032)*		AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	2021 Census	Adjusted for Car-Free Development	Arrivals	Departures	Arrival	Departures
Underground, metro, light rail, tram	0.1%	0.2%	0	0	0	0
Train	4.7%	8.0%	3	22	15	7
Bus, minibus or coach	7.5%	12.7%	6	35	23	12
Taxi	1.1%	1.9%	1	5	3	2
Motorcycle, scooter or moped	0.3%	0.0%	0	0	0	0
Driving a car or van	36.3%	0.0%	0	0	0	0
Passenger in a car or van	4.3%	0.0%	0	0	0	0
Bicycle	7.7%	13.1%	6	35	24	12
On foot	36.5%	61.9%	27	168	114	57
Other method of travel to work	1.4%	2.4%	1	6	4	2

*Any errors due to rounding.

- 5.2.14. In the AM peak period, it is estimated that the proposed development would generate 237 trips by active travel and 66 trips by public transport. In the PM peak period, it is estimated that the proposed development would generate 207 trips by active travel and 58 trips by public transport.
- 5.2.15. Noting the existing high-quality active travel and public transport infrastructure surrounding the site, in addition to future proposed improvements (described in Chapter 3), it is considered that there is ample infrastructure and capacity to accommodate the predicted increase in demand from the proposed development.
- 5.2.16. As previously stated, the development is proposed to be car-free, with the exception of servicing / deliveries, as such, all trips to the development will be made by sustainable transport modes, in accordance with adopted policy and guidance.

5.3 DELIVERIES AND SERVICING

- 5.3.1. It is acknowledged that the proposed development would see a number of deliveries (such as post, courier and food deliveries) and refuse collection trips, however, it is proposed that trips of this nature would be scheduled to occur outside of the network peak hours.

5.4 SUMMARY

- 5.4.1. The proposed development will be car-free and does not provide any car parking spaces or vehicle facilities, apart from a delivery / collection bay located on Scott Road (consistent with the previously consented scheme). Due to the accessible and highly sustainable location of the proposed development, it is envisaged that any future residents, staff and visitors will travel to/from the site via sustainable transport modes. Furthermore, although the city centre does provide a number of car parking facilities, these are often fully utilised and due to their associated high costs it is assumed that residents, staff and visitors will not travel to/from the site via car. As such, it is envisaged that the development will not generate any car trips, other than infrequent off-peak trips for deliveries and refuse collection.
- 5.4.2. In total, it is estimated that the proposed development may generate a total of 316 trips in the AM peak period and 276 trips in the PM peak period, none of which are to be made by private vehicle. Noting the existing high-quality active travel and public transport infrastructure surrounding the site, in addition to future proposed improvements (described in Chapter 3), it is considered that there is ample infrastructure and capacity to accommodate the predicted increase in demand from the proposed development.
- 5.4.3. In relation to the proposed bike hub, residents of the tower will have primary access to the cycle parking spaces provided, with them being required to register for a space, any unused spaces will be rented out as part of the bike hub to ensure the most efficient use of spaces provided. It is anticipated that any trips to/from the bike hub will be made via cycle due to the purpose and nature of the hub. It is also acknowledged that there may be ancillary deliveries associated with the maintenance and repair service, however, these would be made via the proposed loading / collection bay on Scott Road and will be scheduled outside of network peak hours. The utilisation of the bike hub will be strictly monitored and shared as part of the annual monitoring reports undertaken in line with the FTP.
- 5.4.4. The development is proposed to be car-free, with the exception of servicing / deliveries, as such, all trips to the development will be made by sustainable transport modes, in accordance with adopted policy and guidance.

6 DEVELOPMENT IMPACTS

6.1 OVERVIEW

6.1.1. This Chapter of the report identifies the impact of the development proposals on the surrounding transport network.

6.2 DEVELOPMENT IMPACTS

6.2.1. As set out in Chapter 5, it is estimated that the proposed development would generate 316 trips in the AM peak period and 276 trips in the PM peak period.

6.2.2. It is envisaged that there will be minimal impact on the surrounding active travel infrastructure in the city centre in the AM and PM peak hours as there is noted to be suitable infrastructure to support an uplist in residents from the proposed development.

6.2.3. Utilising the 2021 Census modal share data, the proposed development is expected to have minimal impact on the cycling network, envisaging 41 cycle trips in the AM peak period and 36 in the PM peak period. Noting the proposed cycle improvements (described in Section 3.5), it is safe to assume that cycle trips in the future will increase in line with Cardiff Council's modal shift targets.

6.2.4. Furthermore, the provision of a state-of-the-art bike hub is expected to further promote the use of cycling in the city by providing high-quality, secure cycle parking spaces where members of the public will be confident leaving their bikes.

6.2.5. Public transport accounts for just over 21% of all travel to work trips with a 13% bus/coach and 8% train journeys split. As a result of the development being car-free and located within the centre of Cardiff, located within close proximity to many employment and leisure facilities, it is safe to assume that a high majority of residents will travel using active travel modes.

6.2.6. As well as the delivery of much needed high-quality homes to address Cardiff Council's housing need, the proposed development brings with it a wide range of enhanced planning and public benefits. The benefits include the delivery of a strategically important city Centre site, new flexible non-residential floorspace that will activate Central Square, a publicly accessible bike hub and cafe, a new pavilion building that can accommodate a restaurant, extensive public realm landscaping in and around the buildings, highly sustainable and energy efficient buildings, and other significant economic and social benefits for the city.

6.2.7. Any servicing / delivery trips to the proposed development will be made via a collection / delivery lay by on Scott Road, with any servicing / delivery trips scheduled outside of the network peak hours.

6.2.8. It can be concluded that the proposed development is expected to provide a significant positive contribution to the ongoing regeneration of this part of Cardiff City Centre, building on the success of the wider Central Square area. The proposed development is not expected to negatively impact the local highway network due to it being car-free, and any future trips made by active travel / public transport are expected to be well accommodated within the existing and future sustainable transport network. Furthermore, the proposed development is expected to encourage the use of active travel in the area by providing a state-of-the-art bike hub.

7 MITIGATION MEASURES

7.1 OVERVIEW

7.1.1. This chapter of the report identifies the mitigation strategies for the proposed development.

7.2 CONSTRUCTION

7.2.1. As part of the construction phase, a CEMP will be implemented to manage the construction traffic associated with the development. This Application is supported by an outline CEMP and a detailed CEMP will be controlled via a condition.

7.2.2. The CEMP will not serve to reduce the amount of traffic associated with the construction phase of the development but will instead aim to ensure that this traffic is effectively managed to reduce the level of impact on the local highway network and active travel users.

7.2.3. Furthermore, the CEMP will include a travel plan for construction workers to support staff travelling to/from the site via sustainable transport modes.

7.3 CYCLE STORAGE

7.3.1. The proposals include the provision of 528 cycle parking spaces within the tower, reflecting the previously agreed approach of one cycle space per apartment. Additionally, the proposals include for 52 cycle parking spaces to the east of the site within the pedestrianised area to the south of the HMRC building. Further details of the breakdown of cycle parking provision are provided in Chapter 4.

7.3.2. Based on the central location of the site, its high walkability, the existing modal share of cyclists in the area (7.7%) and the existing utilisation of cycle parking surrounding the site (presented in Section 3.5), it is likely that cycle ownership may be low and that the proposed cycle parking may provide an over provision. To avoid having unused provision, it is proposed that a bespoke, state-of-the-art bike hub will be provided.

7.3.3. To ensure that the residents of the tower have primary access to the cycle parking spaces provided within the building, residents will have first access to the cycle parking spaces, with them being required to register for a space. Any unused spaces will be rented out as part of the bike hub.

7.3.4. The proposed bike hub is a new and innovative and is proposed to compliment the proposed cycle parking improvements being undertaken by Cardiff Council (described in Section 3.5) by providing secure cycle parking provision in the heart of the city centre. The bike hub is expected to promote the use of cycling in the city by providing high-quality, secure cycle parking spaces where members of the public will be confident leaving their bikes, aiding Cardiff Council's modal shift targets.

7.3.5. The management and operation of the proposed bike hub can be secured via a suitably worded planning condition.

7.4 FRAMEWORK TRAVEL PLAN

7.4.1. A Framework Travel Plan (FTP) has been prepared as part of this application and will be implemented for the scheme; the overall objective of the FTP is to promote the use of sustainable transport modes of travel to/from the site. The FTP has been prepared to achieve BREEAM accreditation.

7.4.2. The FTP has identified a number of measures to encourage sustainable travel to/from the site, the measures are as follows:

- Produce and distribute Travel Information Packs (TIPs) to residents / staff and provide details of the FTP;
- Provide a sustainable travel pack to visitors;
- Liaise with residents / staff to explain the objectives and benefits of the Travel Plan, which includes bringing an awareness of the travel strategy, encouraging participation where possible and advising on sustainable travel access options;
- Actively encourage residents, staff and visitors to use sustainable transport modes to travel to/from the site;
- Conduct annual transport surveys of resident / staff travel patterns;
- Be the point of contact and on-going liaison with outside bodies; and,
- Acquire supporting information, such as public transport timetables and cycle maps to be distributed to residents and staff.

8 SUMMARY AND CONCLUSIONS

8.1 SUMMARY

- 8.1.1. WSP has been commissioned by REAP 3 Limited ('the Applicant') to prepare a TS in support of the detailed planning application being submitted to Cardiff Council, for the development of Plots 4 and 5, Central Square, City Centre, Cardiff ('the site').
- 8.1.2. The site was granted permission in May 2024 (planning ref: 21/02984/MJR) for two separate buildings; a 35-storey residential-led mixed purpose tower to the west and a standalone 2-storey pavilion for commercial use to the east of the site.
- 8.1.3. This application seeks full planning permission for the following description of development:
"Mixed-use development to provide residential accommodation, flexible non-residential uses, cycle parking, landscaping and other associated works"
- 8.1.4. The proposed development includes:
- A landmark 50 storey building with a maximum height of up to 177.85m Above Ordnance Datum (AOD);
 - 528 new homes (Class C3) comprising a mix of 1-bed and 2-beds;
 - A pavilion building within Central Square comprising up to 601sqm of flexible non-residential floorspace (flexible Class A1 and A3);
 - 2,856.5sqm of high quality internal and external amenity space through provision of roof terraces, lounges, coworking, gym and other wellbeing spaces;
 - A basement level providing ancillary residential floorspace; and,
 - A car-free development with 528 cycle parking spaces within proposed building, including 5% accessible spaces, and a publicly accessible, state of the art bike hub and café. Additionally, 52 public cycle spaces are provided within adjacent square provided as Sheffield stands.
- 8.1.5. The site sits at the heart of the wider 'Central Square' regeneration area in Cardiff City Centre. Central Square is a strategically important area which Cardiff Council consider to be a gateway to the city, and an opportunity to showcase the best that Cardiff has to offer. Given the strategic importance of the location, Cardiff Council envisage that the regeneration of Central Square, towards which this development will contribute significantly, will play a key role in attracting investment on other strategically important development sites in the city.
- 8.1.6. The proposed development provides the opportunity to make a significant positive contribution to the ongoing regeneration of this part of the Cardiff. The proposed development will build upon the success of the wider Central Square area, proposing a development of exceptional architectural and residential quality. The Applicant is fully committed to the delivery of the site, and it is their ambition to create a new iconic landmark for Cardiff and Wales.
- 8.1.7. As well as the delivery of much needed high-quality homes to address Cardiff Council's housing need, the proposed development brings with it a wide range of enhanced planning and public benefits. The benefits include the delivery of a strategically important city Centre site, new flexible non-residential floorspace that will activate Central Square, a publicly accessible bike hub and cafe, a new pavilion building that can accommodate a restaurant, extensive public realm landscaping in and around the

buildings, highly sustainable and energy efficient buildings, and other significant economic and social benefits for the city.

8.2 CONCLUSION

8.2.1. This TS demonstrates that:

- The proposals comply with national, regional and local policy objectives;
- The site is highly accessible by active travel and benefits from high-quality surrounding active travel infrastructure;
- The site is well connected to public transport, with it being closely located to Cardiff Central Railway Station, Cardiff Central Bus Interchange and bus stops located directly adjacent to the south to the site on Wood Street;
- The central location of the site makes it well located in terms of its proximity to key facilities and amenities;
- The site is car-free and any delivery / servicing trips will be scheduled outside of network peak hours, therefore not negatively impacting the operation of the local highway network;
- The proposed development will make a significant contribution to the ongoing regeneration of Cardiff Central Square;
- There is ample infrastructure and capacity to accommodate the number of sustainable transport trips generated by the proposed development; and,
- The provision of a state-of-the-art bike hub located in Cardiff City Centre is expected to promote the use of cycling in the area.

Appendix A

CARDIFF CENTRAL ENTERPRISE ZONE



SITE A | Central Enterprise Zone (CEZ)

Overview of Planning Applications:

The Embankment:

- 1) 21/00783/MJR | Land at Current Embankment (Residential / mixed use)

Resolution to Grant*

Central Square:

- 2) 19/03052/MJR | Bus Interchange
- 3) 21/02984/MJR | Plot 4 and 5 (Apartments and kiosk)

Completed
Consented

Central Quay:

- 4) 18/00735/MJR | Multi-storey car park
- 5) 19/03171/MJR | Offices (with retail / food and drink)
- 6) 20/00102/MJR | Brewhouse. Offices (with retail / food and drink)
- 7) 21/02883/MJR | Phase 2, Plot 1 (Apartments)
- 8) 21/02884/MJR | Phase 2, Plot 2 (Apartments)
- 9) 22/00378/MJR | Plot 9 (Hotel)

Under Construction
Consented
Under Construction
Under Construction
Resolution to Grant*

Capital Quarter:

- 10) 18/02634/MJR | The Copper Works (Apartments)

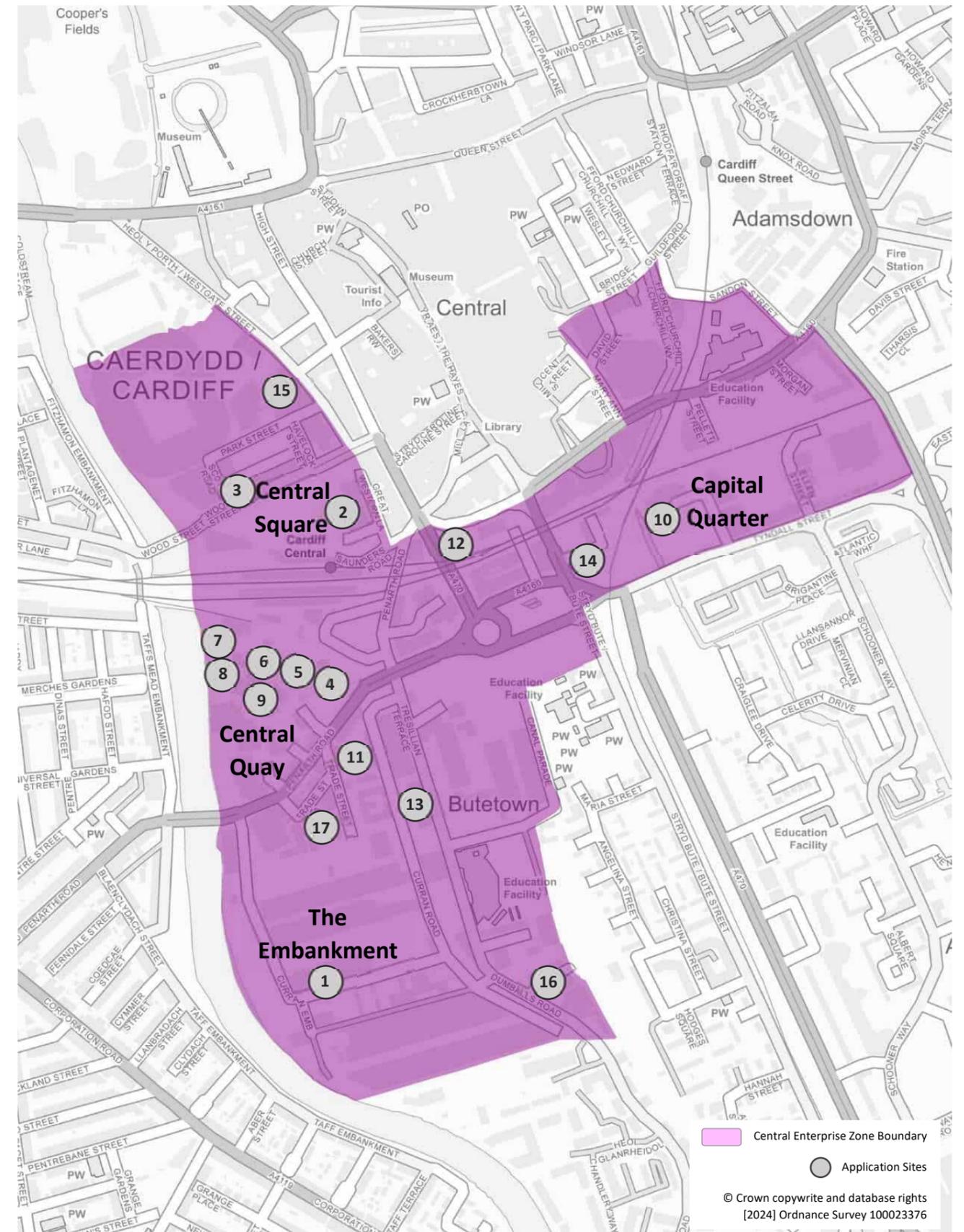
Completed

Other Planning Consents:

- 11) 19/01930/MJR | Crawshay Court, Curran Road (Apartments)
- 12) 17/01906/MJR | Former Custom House, Custom House Street (Hotel and Restaurant)
- 13) 17/02404/MJR | Former Browning Jones and Morris (Apartments)
- 14) 17/02615/MJR | Land at John Street (Offices)
- 15) 19/01538/MJR | Westgate Street (Hotel)
- 16) 20/01543/MJR | Anchor Court, Dumballs Road (Apartments)
- 17) 22/00415/MJR | Suffolk House, Trade Street (Apartments)

Under Construction
Completed
Completed
Under Construction
Completed
Under Construction
Consented

*Resolution to grant planning permission subject to the signing of a Section 106 agreement



Central Square

Overview:

Located outside Cardiff Central railway station, Central Square is a landmark mixed use development which includes Grade A office accommodation, headquarters for BBC Cymru Wales, a bus interchange, premises for HM Revenue and Customs, and ground floor commercial uses.

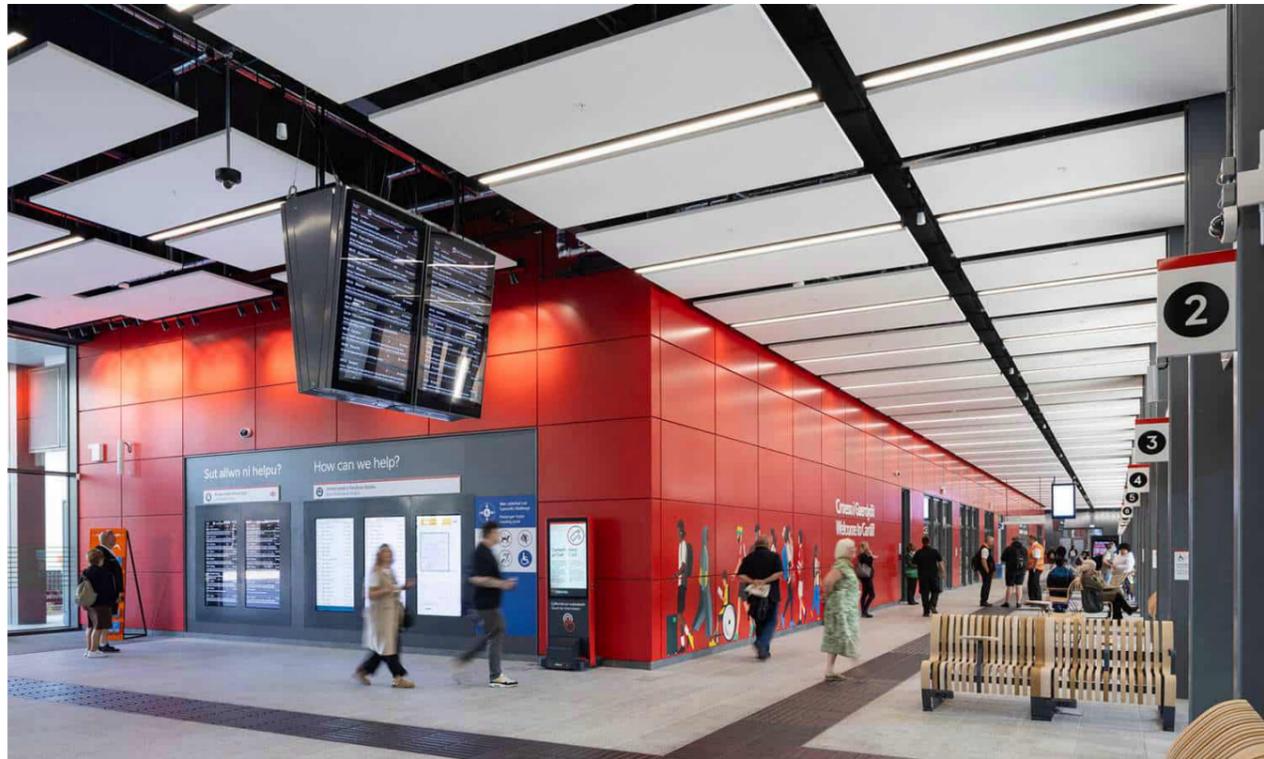
In addition to the provision of a high-quality public realm throughout the area, the redevelopment of Central Square has seen the creation of a new landmark public square at Wood Street.

Development Activity:

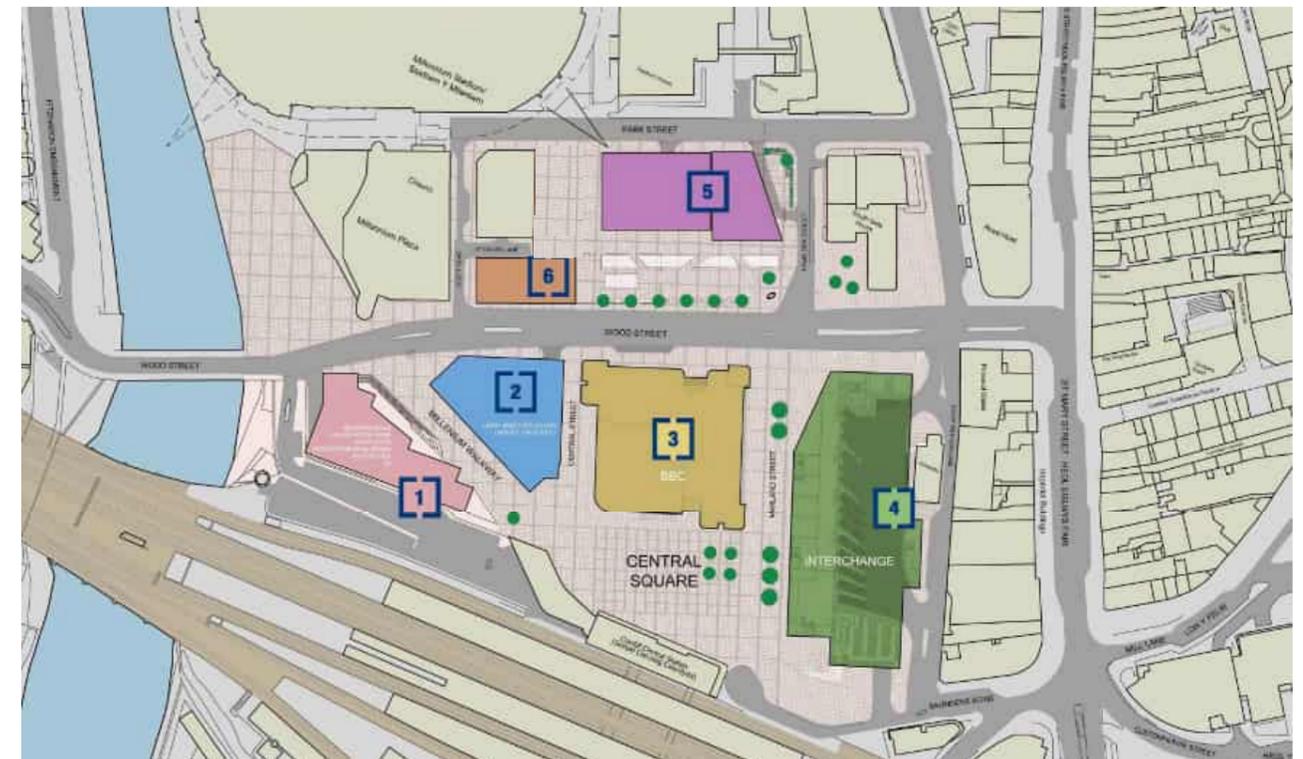
Development of Central Square is well progressed, with Sites 1,2,3 and 5 having been completed. The new Bus Interchange (Site 4) opened in June 2024.



BBC Headquarters



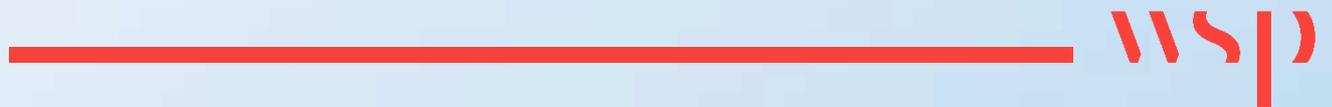
Bus Interchange



Indicative Central Square Masterplan

Appendix B

CARIDFF BUS NETWORK MAP





to Creigiau & Pentrych
Sundays & Bank Holidays only
to Creigiau & Pentrych

Pontprennau single fare zone

FULL NETWORK
FARE ZONE
CARDIFF AND PENARTH
FARE ZONE

CARDIFF AND PENARTH
FARE ZONE
BARRY, SULLY
& DINAS POWYS
FARE ZONE

Ely single fare zone

CARDIFF AND PENARTH
FARE ZONE
BARRY, SULLY & DINAS POWYS
FARE ZONE

CARDIFF AND PENARTH
FARE ZONE

BARRY, SULLY & DINAS POWYS
FARE ZONE

Barry
Town Centre

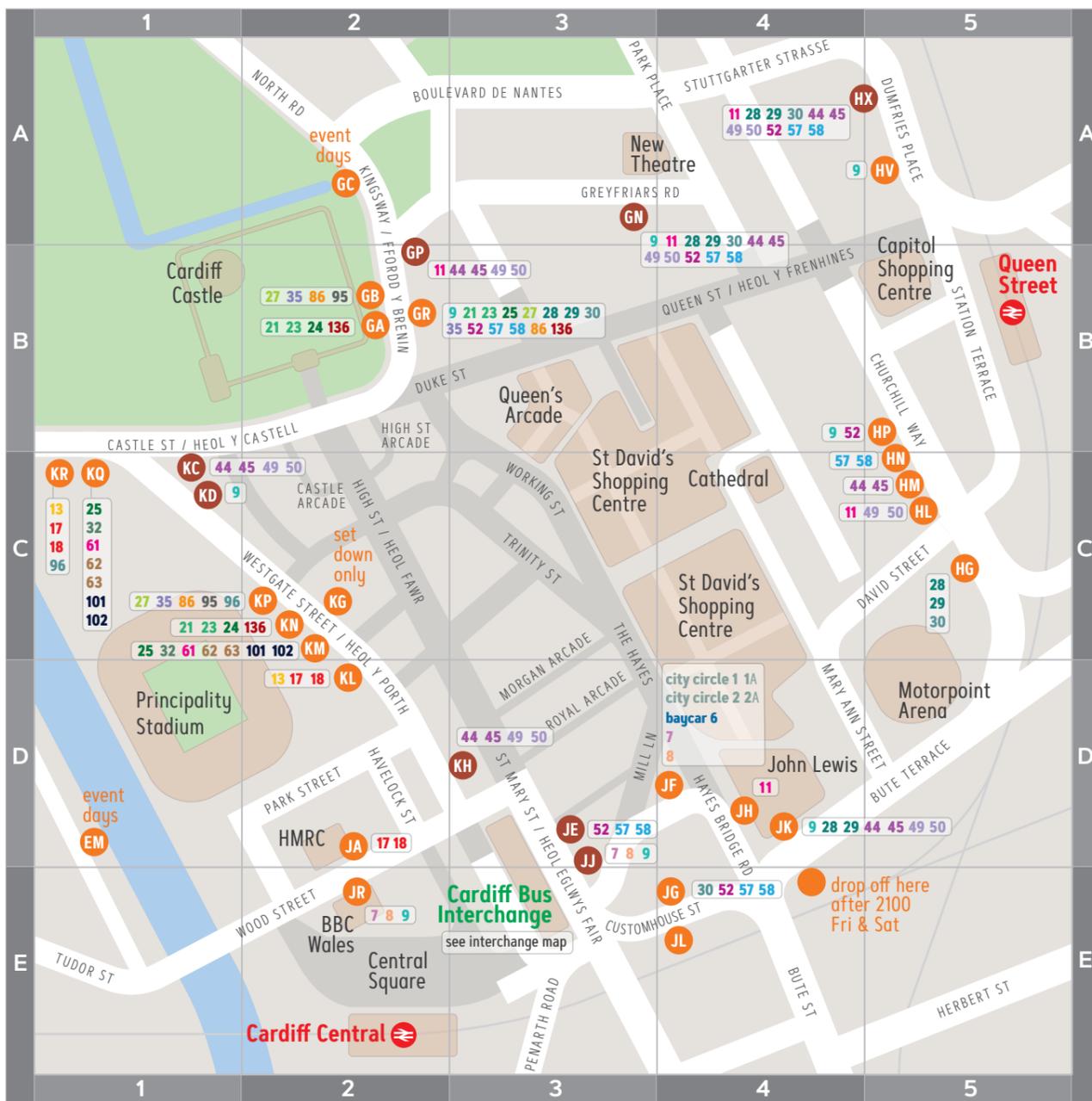
Cardiff
City Centre

Penarth
Town Centre

Barry Island

where to catch your bus in Cardiff city centre

from 5 January 2025



pedestrianised road

St Mary St is closed
Fridays & Saturdays
after 2100

during event days
at the Principality
Stadium, buses may
need to use
alternative stops

check cardiffbus.com
or on the app



buses don't use these stops after
2100 Fridays and Saturdays

after 2100 Fridays and Saturdays,
28 29 use stops **KP & GA** instead
of these stops

route	destination	stop	grid
city circle 11A	clockwise	JF	D4
city circle 22A	anticlockwise	JF	D4
4	Leckwith	8	E3
baycar 6	Cardiff Bay	JF	D4
7	Channel View & Penarth	JJ, JF, JR	D3, D4, E2
8	Cardiff Bay	JJ, JS, JR	D3, D4, E3, E2
9	Sports Village	HV, GN, GR, KD, JR	A5, A3, B2, C1, E2
9	UHW Heath Hospital	JJ, JK, HP	D3, D4, B5

route	destination	stop	grid
11	Sploft, Tremorfa & Pengam Green	HX, GN, GP, JH, HL	A5, A3, B2, D4, C5
13	Drope via Ely	9, KL, KR	E3, D2, C1
17 18	Ely via Canton	JA, KL, KR	D2, D2, C1
21	Rhiwbina & Pantmawr	GR, KN, GA	E3, B2, C2, B2
23	Whitchurch & Pantmawr	GR, KN, GA	E3, B2, C2, B2
24	Whitchurch & Llandaff	KN, GA	E3, C2, B2
25	Llandaff & Whitchurch	GR, KM, KQ	E3, B2, C2, C1

route	destination	stop	grid
27	Llanishen & Thornhill	12, KP, GB	E3, C2, B2
28 29	Llanishen & Thornhill	11, HX, GN, GR, JK, HG	E3, A5, A3, B2, D4, C5
30	Newport	14, HX, GN, GR, JG, HG	E3, A5, A3, B2, E4, C5
32	St Fagans via Fairwater	9, KM, KQ	E3, C2, C1
35	Gabalfa	5, KP, GB	E3, C2, B2
44 45	St Mellons	HX, GN, GP, KC, KH, JK, HM	A5, A3, B2, C1, D3, D4, C5
49 50	Llanrumney	HX, GN, GP, KC, KH, JK, HL	A5, A3, B2, C1, D3, D4, C5
52	Cyncoed	HX, GN, GR, JE, JG, HP	A5, A3, B2, D3, E4, B5

route	destination	stop	grid
57 58	Pontprenau & Llanedeyrn	HX, GN, GR, JE, JG, HN	A5, A3, B2, D3, E4, C5
61	Fairwater & Pentreban	10, KM, KQ	E3, C2, C1
62	Danescourt & Rhydlafer	3, KM, KQ	E3, C2, C1
63	Danescourt & Radyr	3, KM, KQ	E3, C2, C1
86	Heath Hospital & Lisvane	13, KP, GB	E3, C2, B2
92 93 94	Penarth & Barry	7	E3
95	Barry	8	E3
95	Heath Hospital	KP, GB	C2, B2
96	Barry via Wenvoe	6, KP, KR	E3, C2, C1
101 102	Pentreban, Danescourt, Llandaff & Whitchurch, UHW Heath Hospital, Roath, Llanrumney, & St Mellons	13, KM, KQ	E3, C2, C1
136	Pentyrch & Creigiau	2, GR, KN, GA	E3, B2, C2, B2
305	Dinas Powys	13	E3

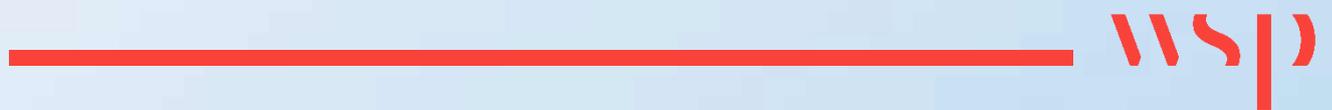
CENTRAL SQUARE
entrance/exit

Cardiff bus interchange



Appendix C

CYCLE PARKING AUDIT



CYCLING AUDIT



Site	% Occupied		
	Weekday Noon	Weekday Eve	
1	100%	67%	-33%
2	50%	30%	-20%
3	30%	30%	0%
4	24%	7%	-17%
5	17%	0%	-17%
6	17%	50%	33%
7	17%	0%	-17%
8	69%	25%	-44%
9	5%	25%	20%
10	0%	17%	17%
11	0%	0%	0%
12	33%	17%	-17%
13	17%	0%	-17%
14	0%	0%	0%

Site	Weekday Noon		Weekday Eve	
	Spaces	Occupied	Spaces	Occupied
1	6	6	6	4
2	10	5	10	3
3	10	3	10	3
4	42	10	42	3
5	6	1	6	0
6	6	1	6	3
7	6	1	6	0
8	16	11	16	4
9	20	1	20	5
10	6	0	6	1
11	4	0	4	0
12	6	2	6	1
13	6	1	6	0
14	6	0	6	0

WEEKDAY NOON

1



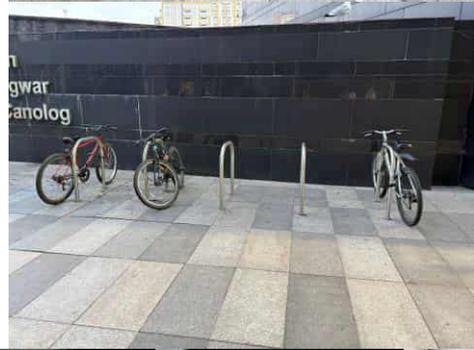
WEEKDAY EVENING



2



3



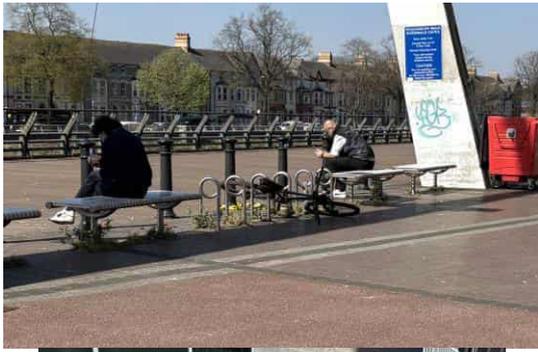
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5



6



7



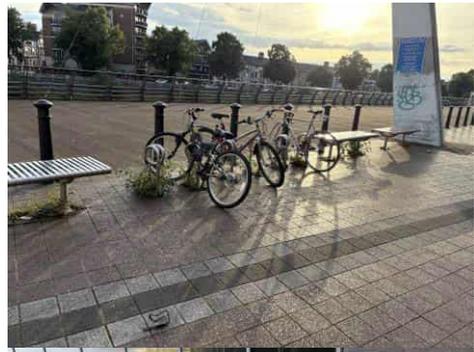
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9



10



11



12



13

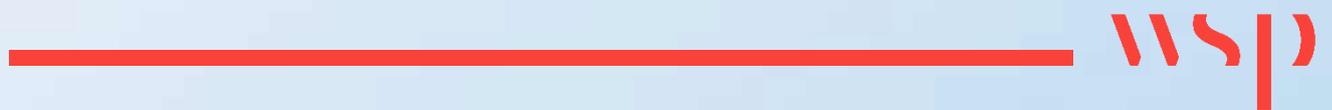


14



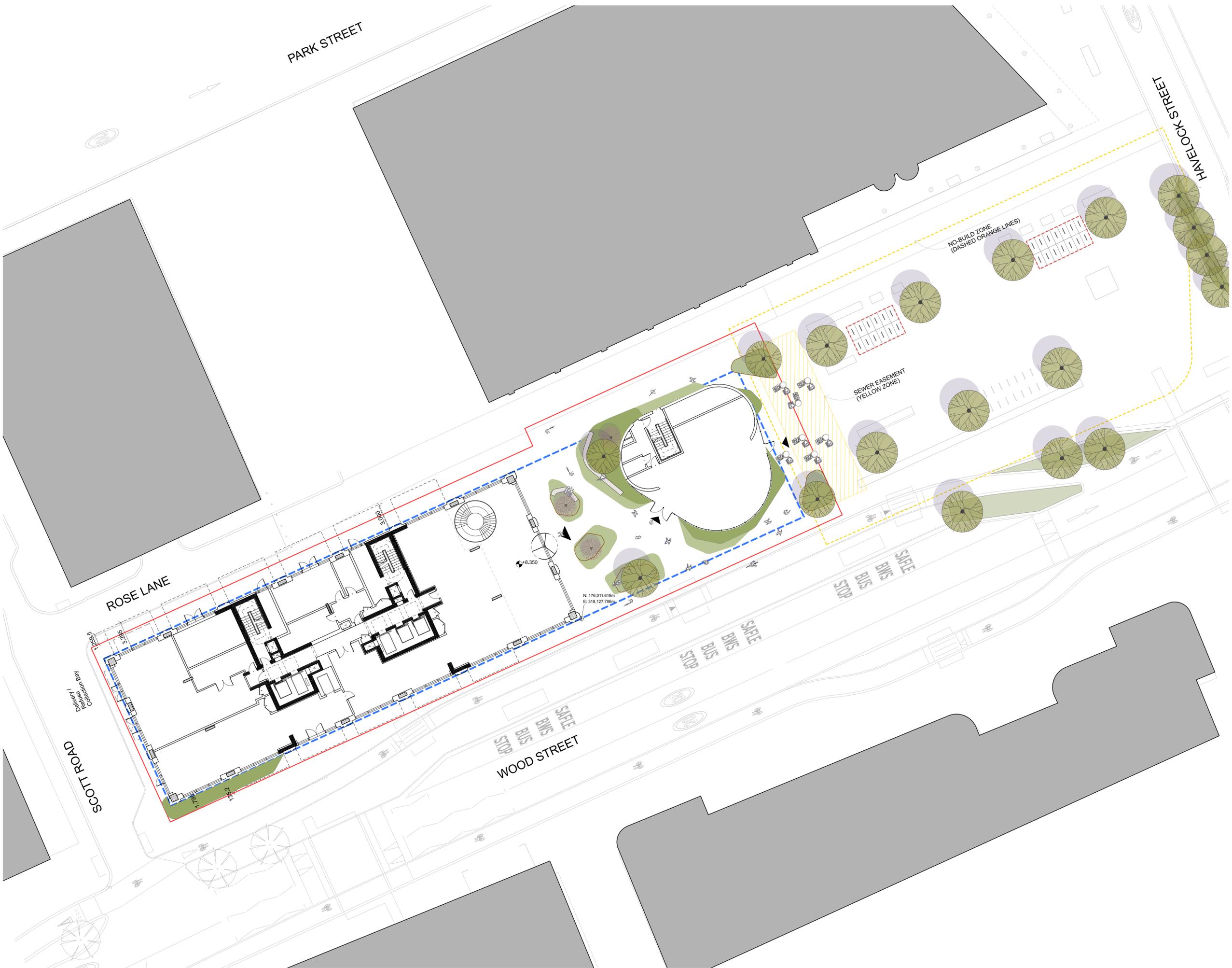
Appendix D

GENERAL ARRANGEMENT PLANS



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- KEY PLAN:
- APPLICATION BOUNDARY
 - APPLICATION BOUNDARY - PROPOSED LANDSCAPE TBC
 - SEWER EASEMENT
 - NO BUILD ZONE
 - PROPOSED BASEMENT
 - ▲ PROPOSED ENTRANCE



00 27/06/25 Issue for Information.

REV.	DATE	DETAILS



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Fourth Floor, The Hive, 41 Lever Street,
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www.5plusarchitects.com

PROJECT:
Central Square
Cardiff

TITLE:
Site Plan
Proposed Buildings

SCALE: 1:200@A1 ORIGIN DATE: 18.06.25 DRAWN: AG CHECKED: PN

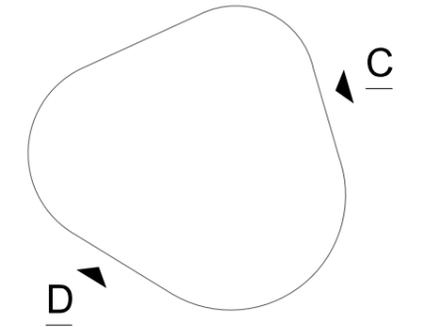
STATUS:
Information

PROJECT: 06159 DRAWING NO: 5PA-MP-00-DR-A-001200 REV: 0

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East Elevation - Elevation C



West Elevation - Elevation D

01 15/07/25 Issued for information

REV:	DATE:	DETAILS:

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Manchester. M1 1FN

London. 0207 253 7644
The Leather Market, Weston Street,
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PROJECT: www.5plusarchitects.com

**Central Square
Cardiff**

TITLE:
**East & West Elevation
Proposed General Arrangement Elevations**

SCALE:	ORIGIN DATE:	DRAWN:	CHECKED:
1:100 @ A1	11.07.25	BP	ATa

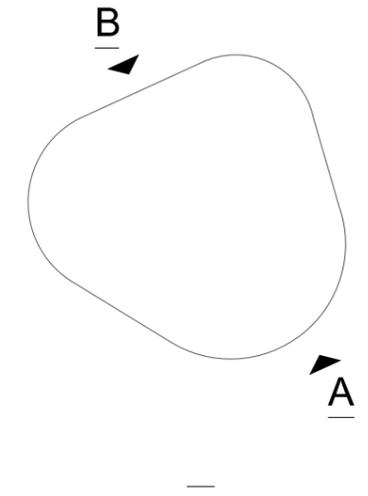
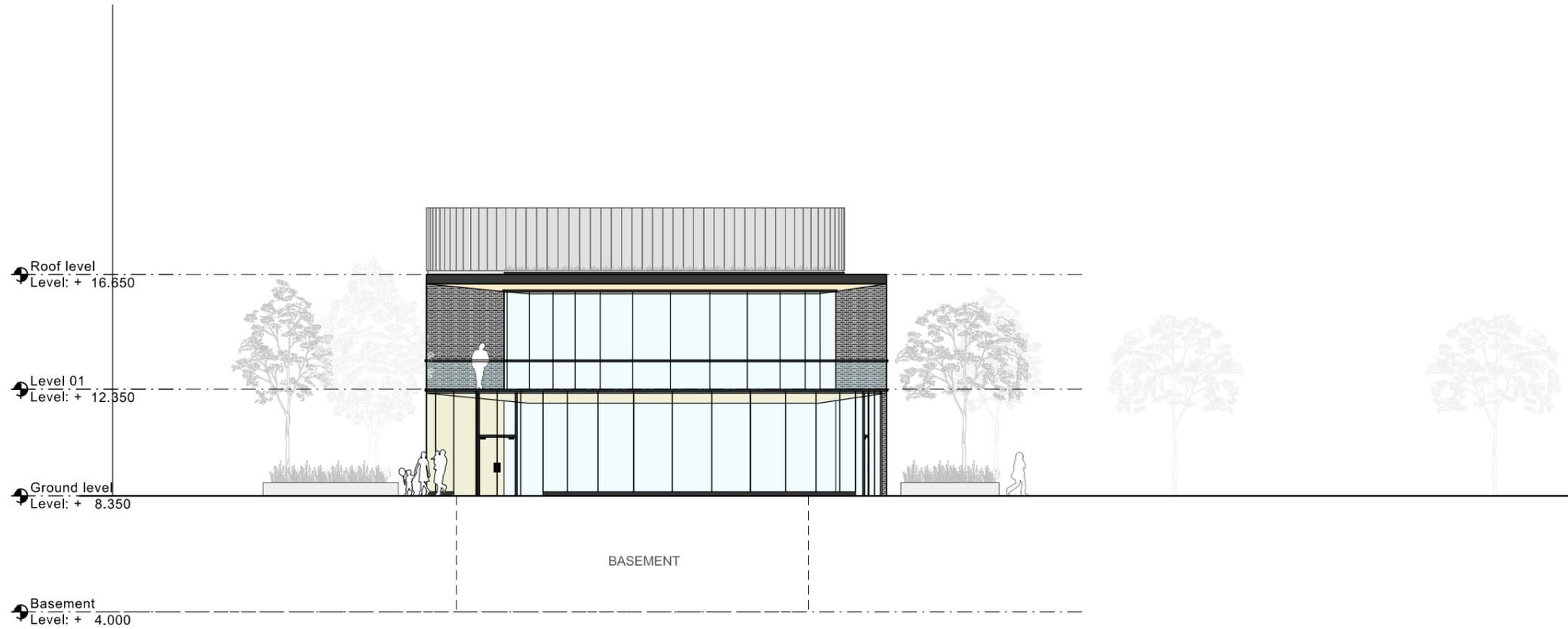
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PROJECT	DRAWING NO:	REV:
06159	-5PA-B2-S-DR-A-042202	01

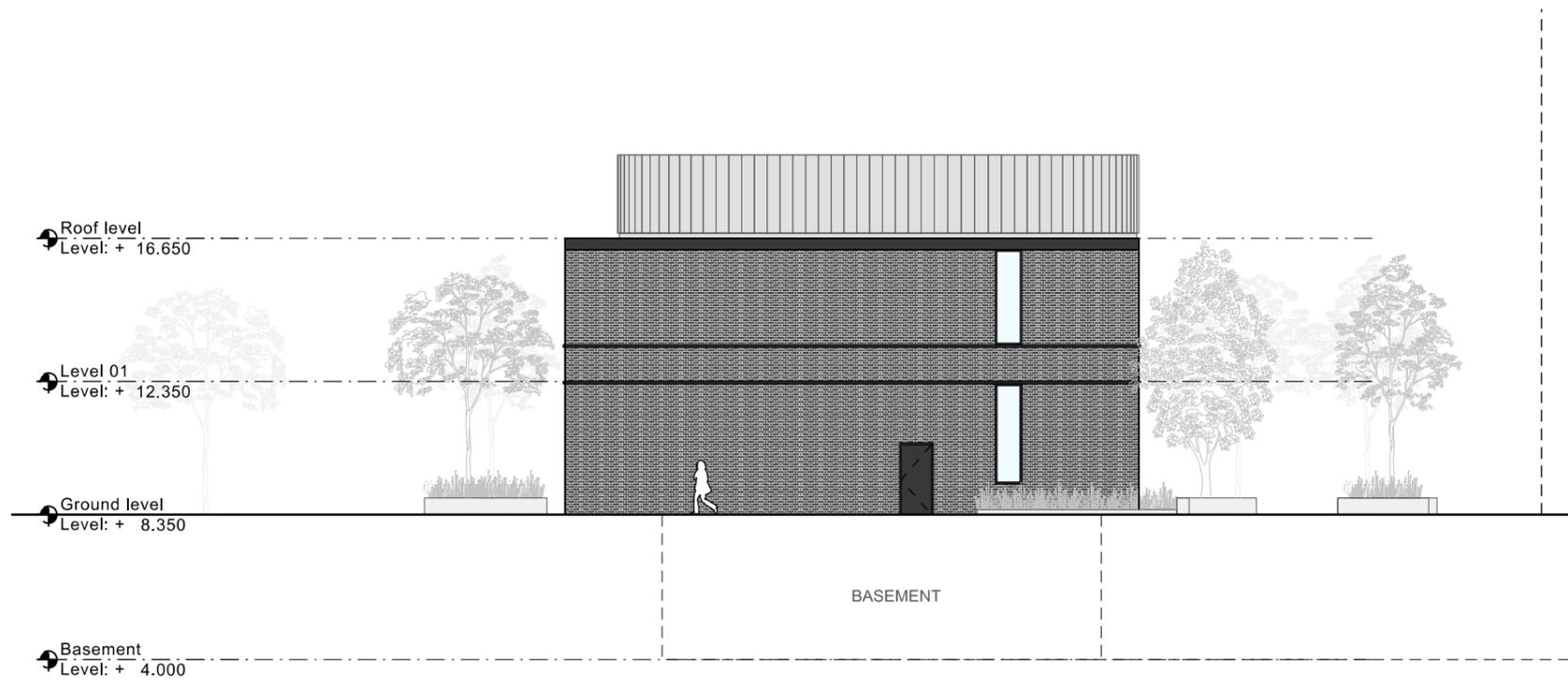
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South Elevation - Elevation A



North Elevation - Elevation B

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REV:	DATE:	DETAILS:
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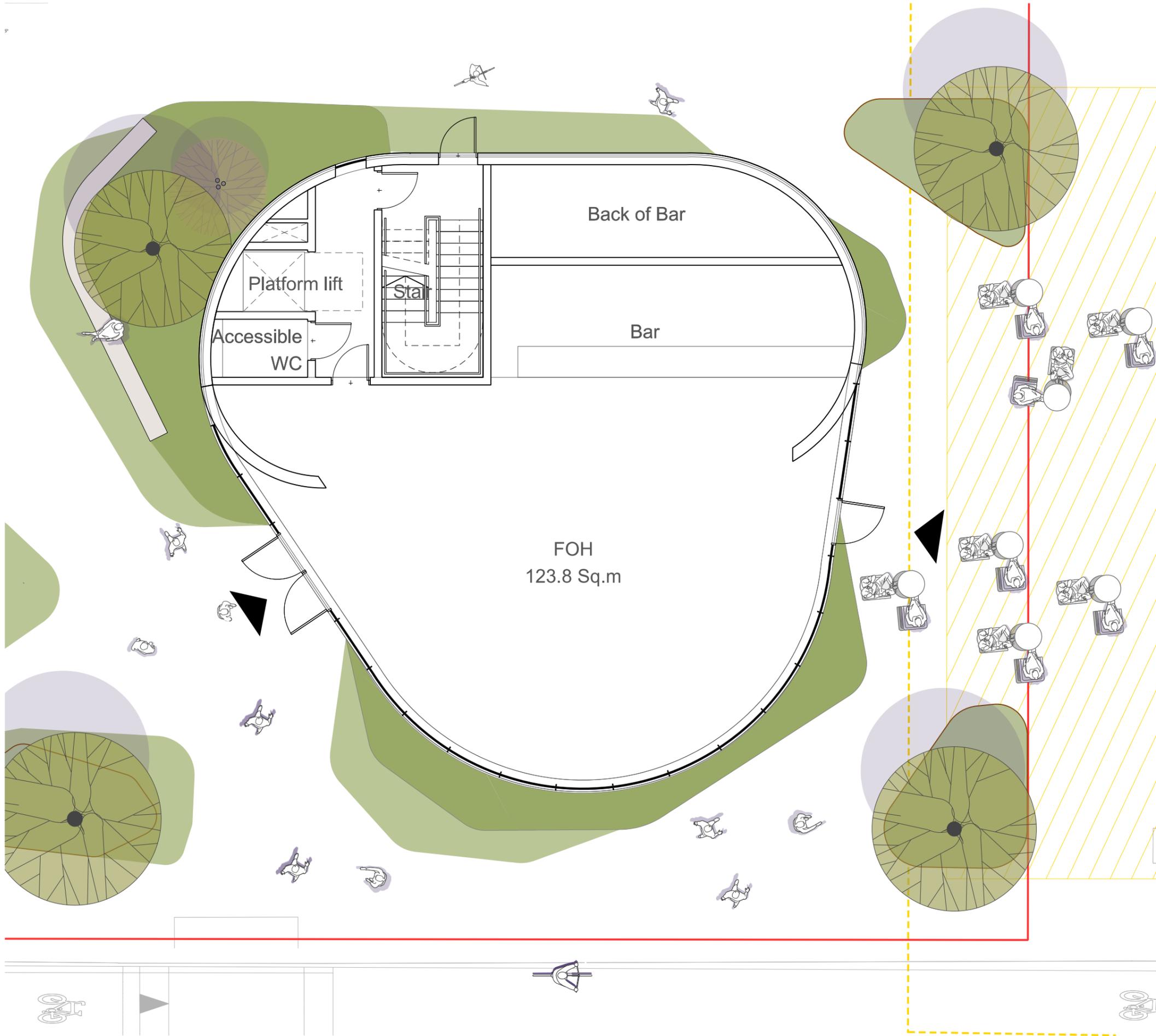
**Central Square
Cardiff**

TITLE:
**North & South Elevation
Proposed General Arrangement Elevations**

SCALE:	ORIGIN DATE:	DRAWN:	CHECKED:
1:100 @ A1	11.07.25	BP	ATa

STATUS:
Information

PROJECT	DRAWING NO:	REV:
06159	-5PA-B2-S-DR-A-042201	01



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01 15/07/25 Issued for information

REV:	DATE:	DETAILS:
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London SE1 3ER

PROJECT:
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Cardiff**

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TITLE:
**Proposed General Arrangement
Ground Floor**

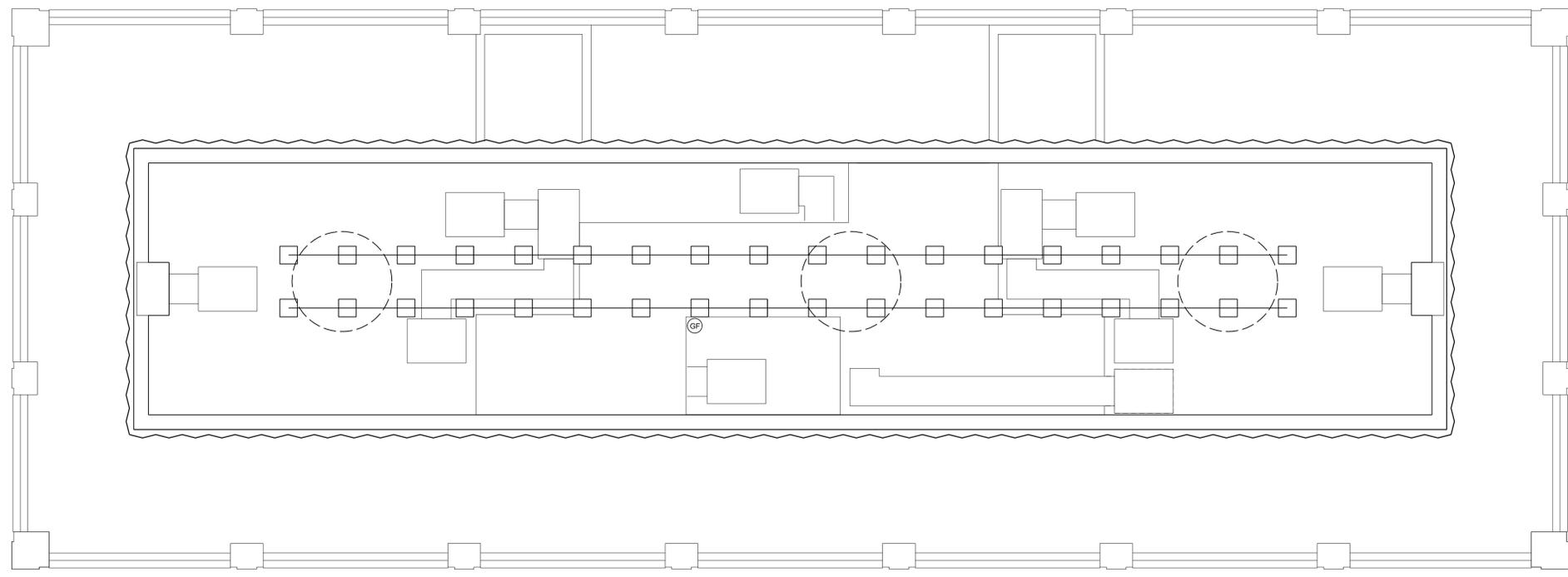
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1:50 @A1	15.07.25	BP	ATa

STATUS:
Information

PROJECT	DRAWING NO:
06159	5PA-B2-00-DR-A-022200

REV:
01

KEY PLAN:



01 07/07/25 WIP - Issue for information

REV.	DATE	DETAILS



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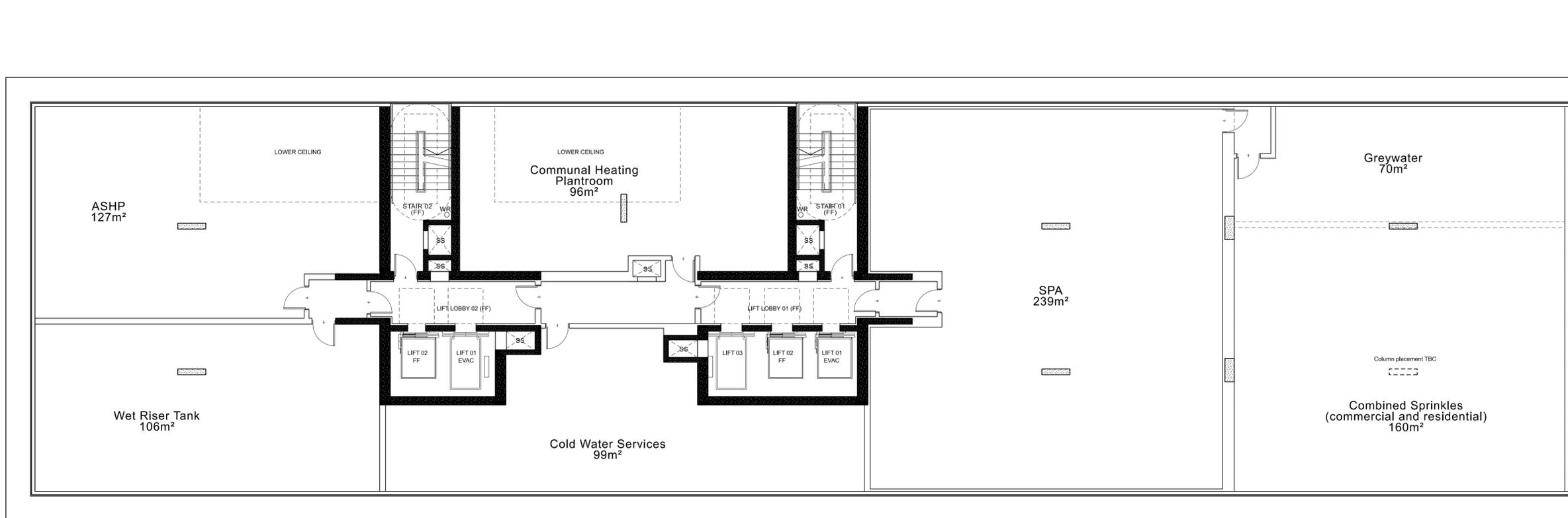
PROJECT:
Central Square
Cardiff

TITLE:
Proposed General Arrangement
Roof - BMU

SCALE:	ORIGIN DATE:	DRAWN:	CHECKED:
1:100@A1	01.07.25	AG	ATa

STATUS:
Information

PROJECT	DRAWING NO:	REV:
06159	SPA-B1-50-DR-A-022204	01



01 07/07/25 WIP Issue for information

REV.	DATE	DETAILS



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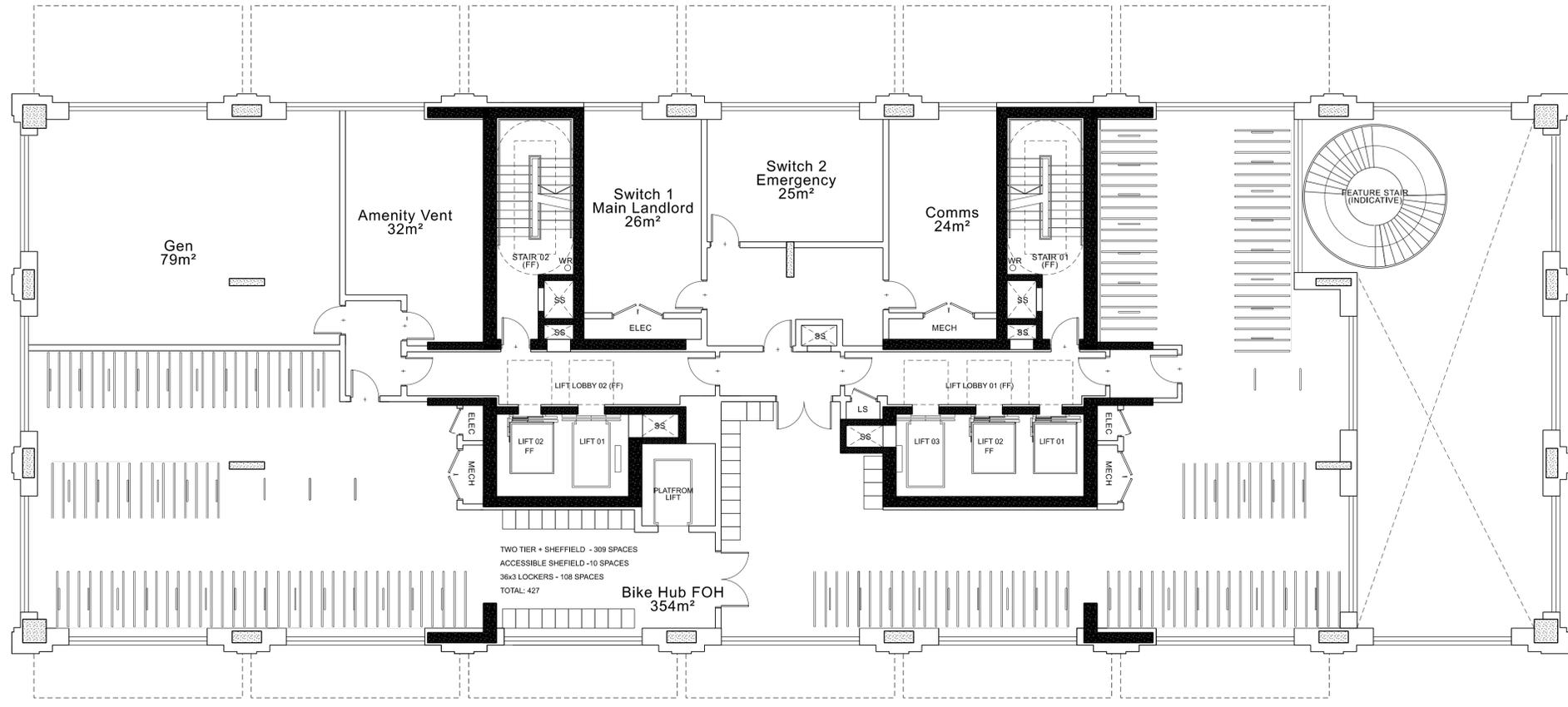
Central Square
Cardiff

TITLE:
Proposed General Arrangement
Basement

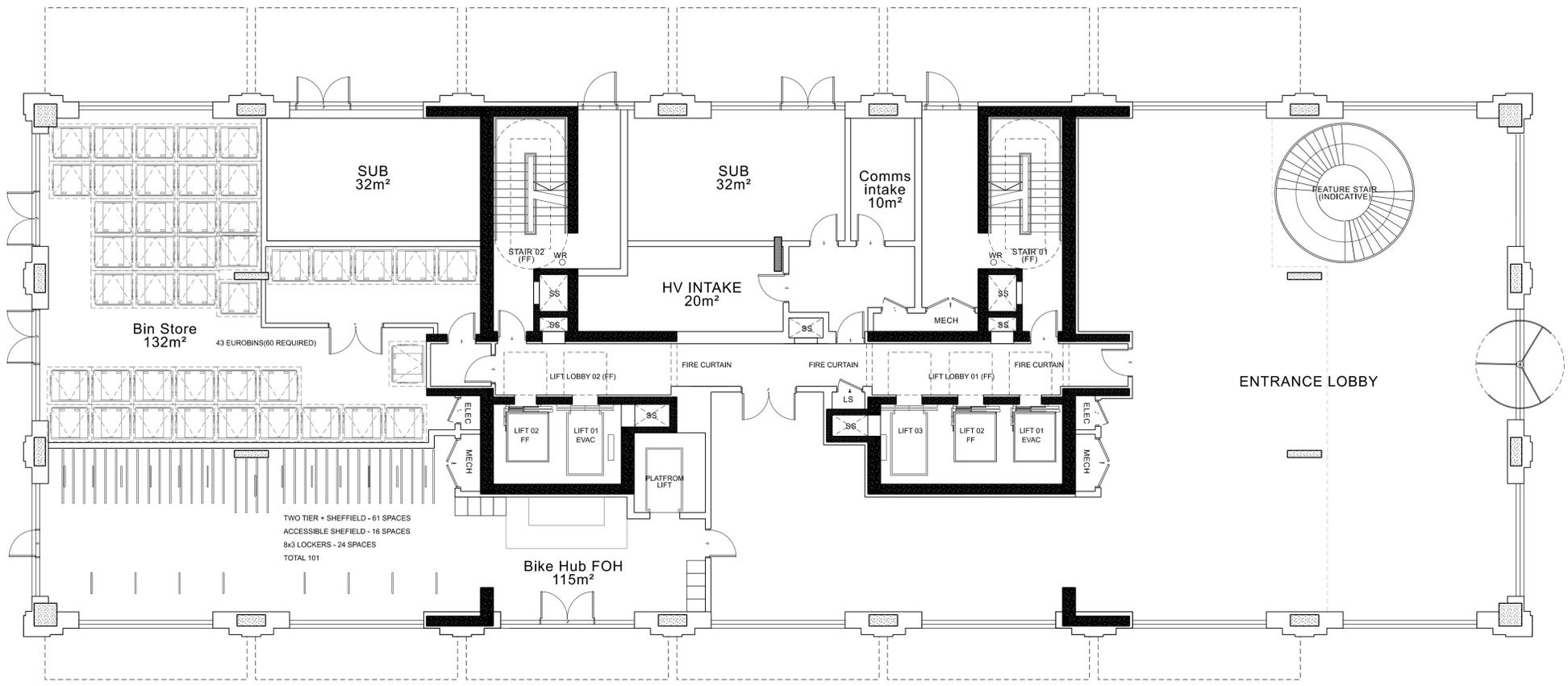
SCALE: 1:100@A1 ORIGIN DATE: 01.07.25 DRAWN: AG CHECKED: ATa

STATUS:
Information

PROJECT: 06159 DRAWING NO: 5PA-B1-B1-DR-A-022200 REV: 01



MEZZANINE



GROUND FLOOR

01	07/07/25	WP Issue for information
0	01/07/25	WP Issue for information
REV:	DATE:	DETAILS:



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London SE1 3ER

PROJECT: Central Square
Cardiff

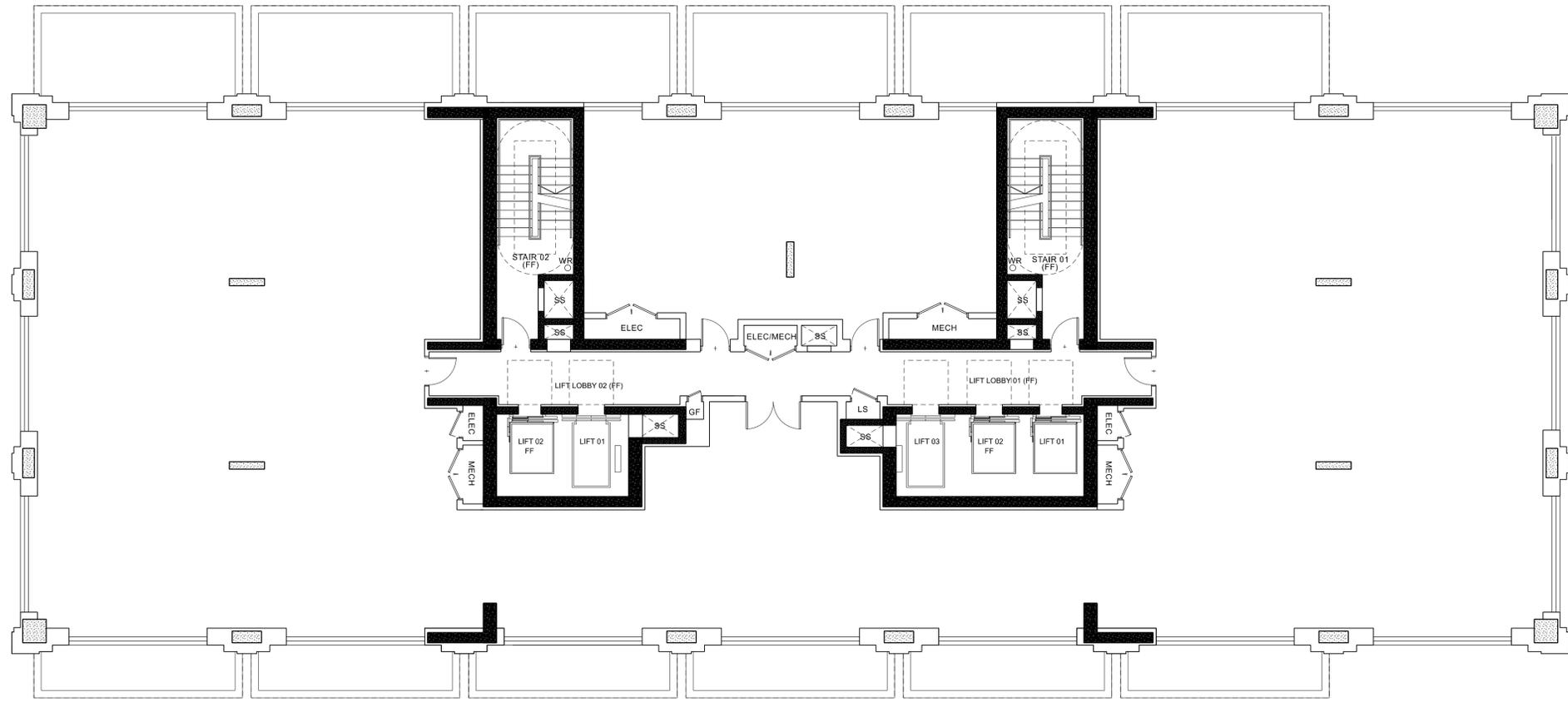
TITLE: Proposed General Arrangement
Ground Floor and Mezzanine

SCALE: 1:100@A1
ORIGIN DATE: 01.07.25
DRAWN: AG
CHECKED: ATa

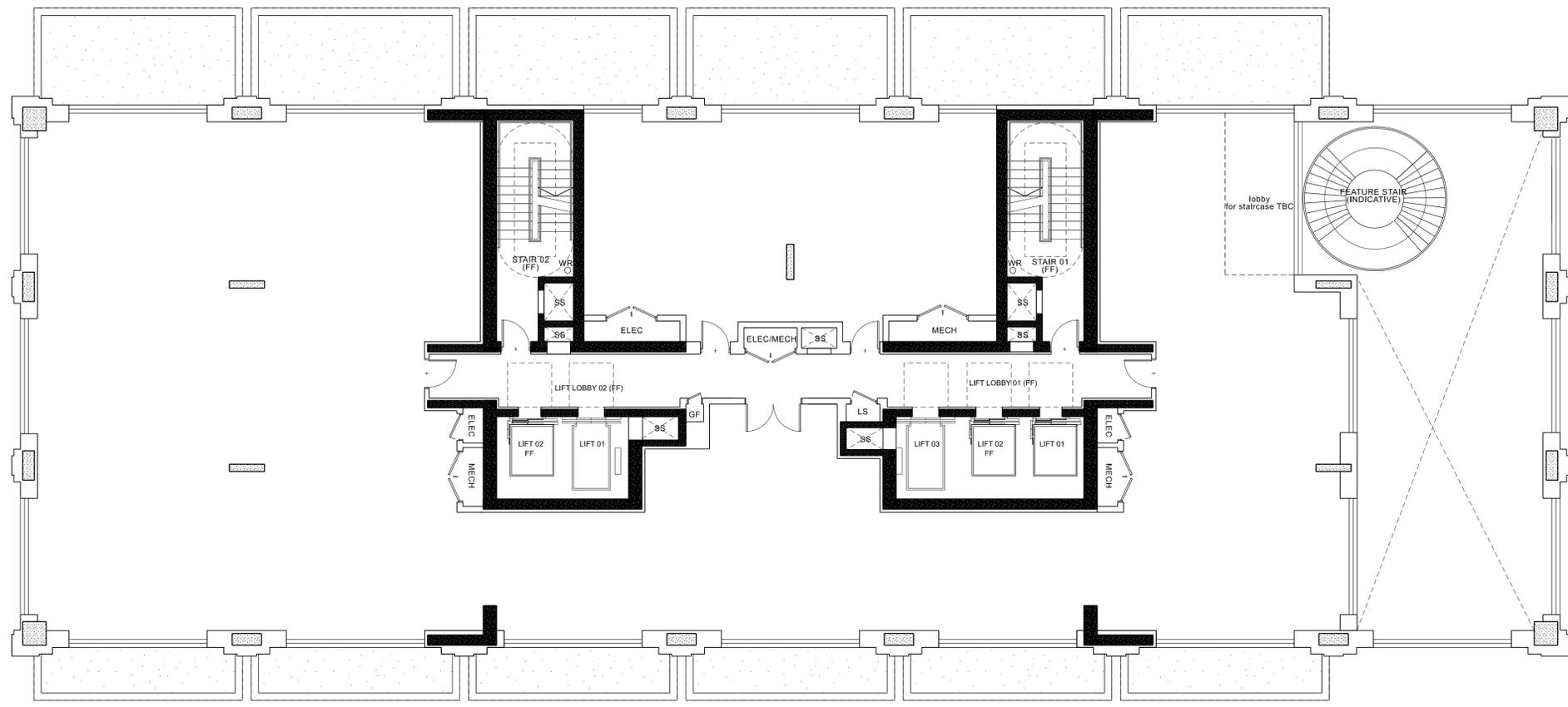
STATUS: Information

PROJECT DRAWING NO: 06159 SPA-B1-XX-DR-A-022200
REV: 01

KEY PLAN:



3RD FLOOR



1ST - 2ND FLOORS

REV.	DATE	DETAILS
01	07/07/25	WIP - Issue for information
0	01/07/25	WIP - Issue for information



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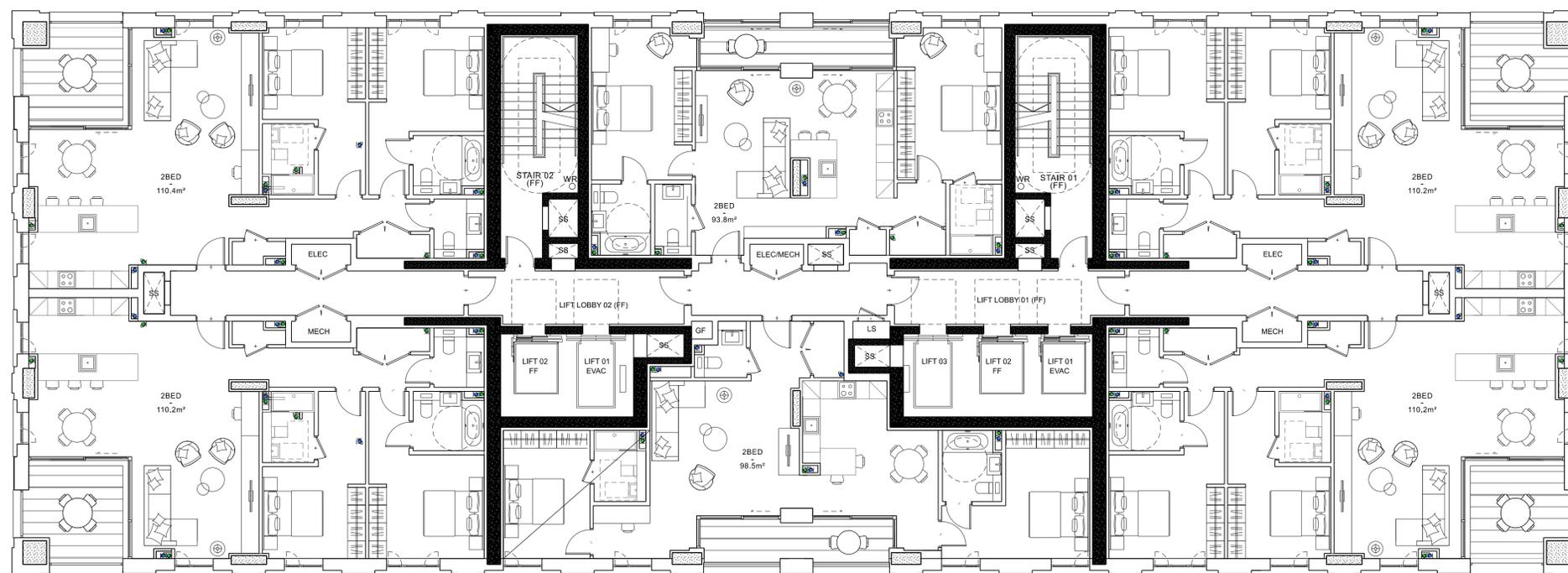
PROJECT: Central Square Cardiff
www.5plusarchitects.com

TITLE: Proposed General Arrangement Amenity Floors

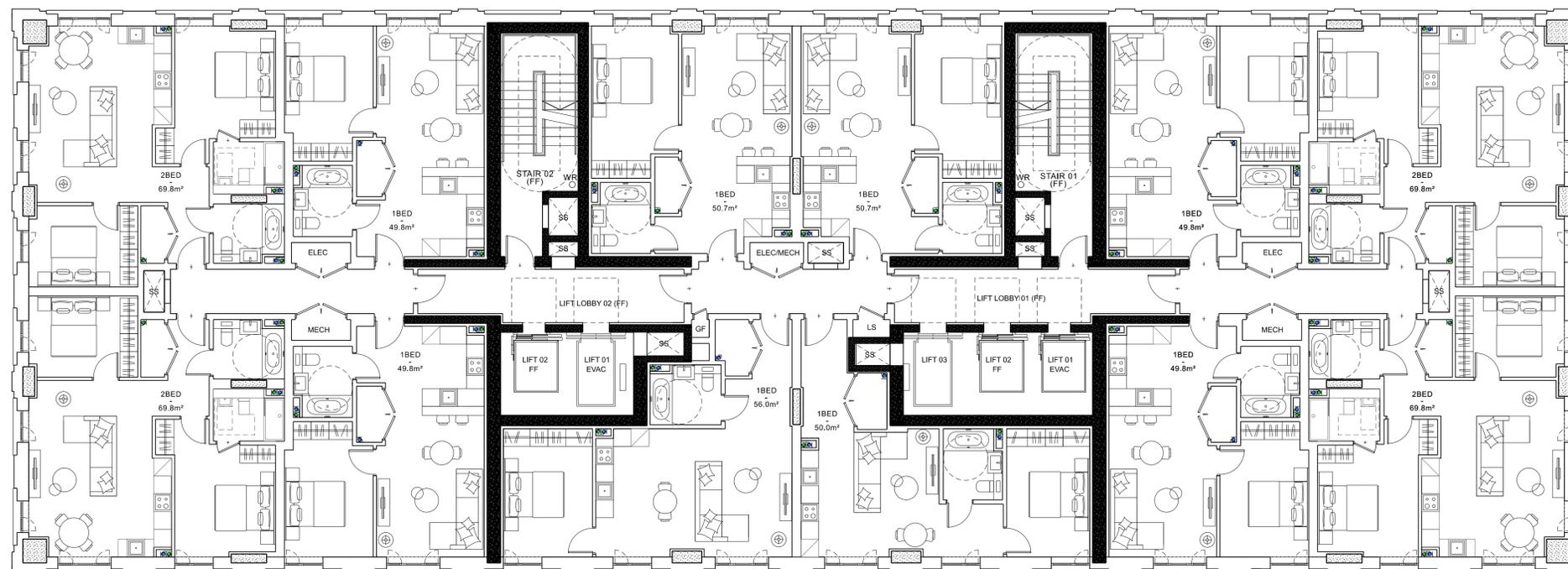
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STATUS: Information

PROJECT: 06159 DRAWING NO: 5PA-B1-XX-DR-A-022201 REV: 01



TYPICAL FLOORS 47TH-48TH



TYPICAL FLOORS 4TH-46TH

01	07/07/25	WIP - Issue for information
0	01/07/25	WIP - Issue for information

REV: DATE: DETAILS:



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PROJECT:
Central Square
Cardiff

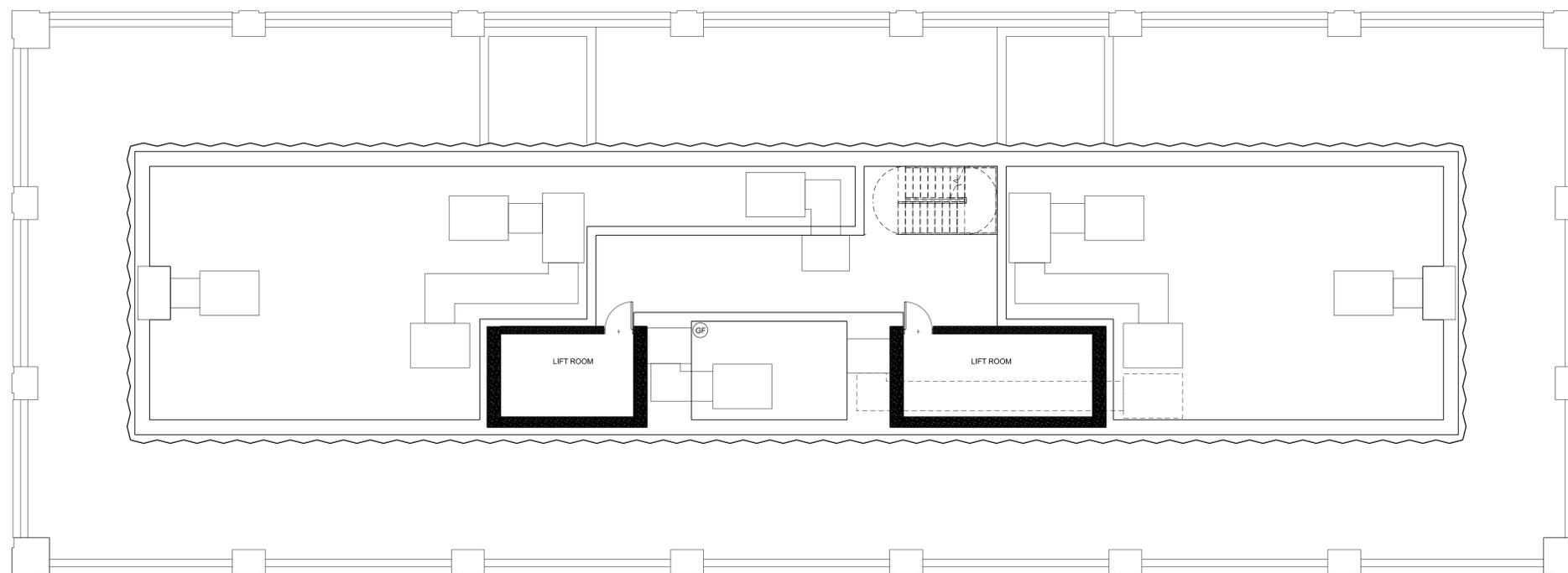
TITLE:
Proposed General Arrangement
Typical Floors 4th-48th

SCALE: 1:100@A1 ORIGIN DATE: 01.07.25 DRAWN: AG CHECKED: ATa

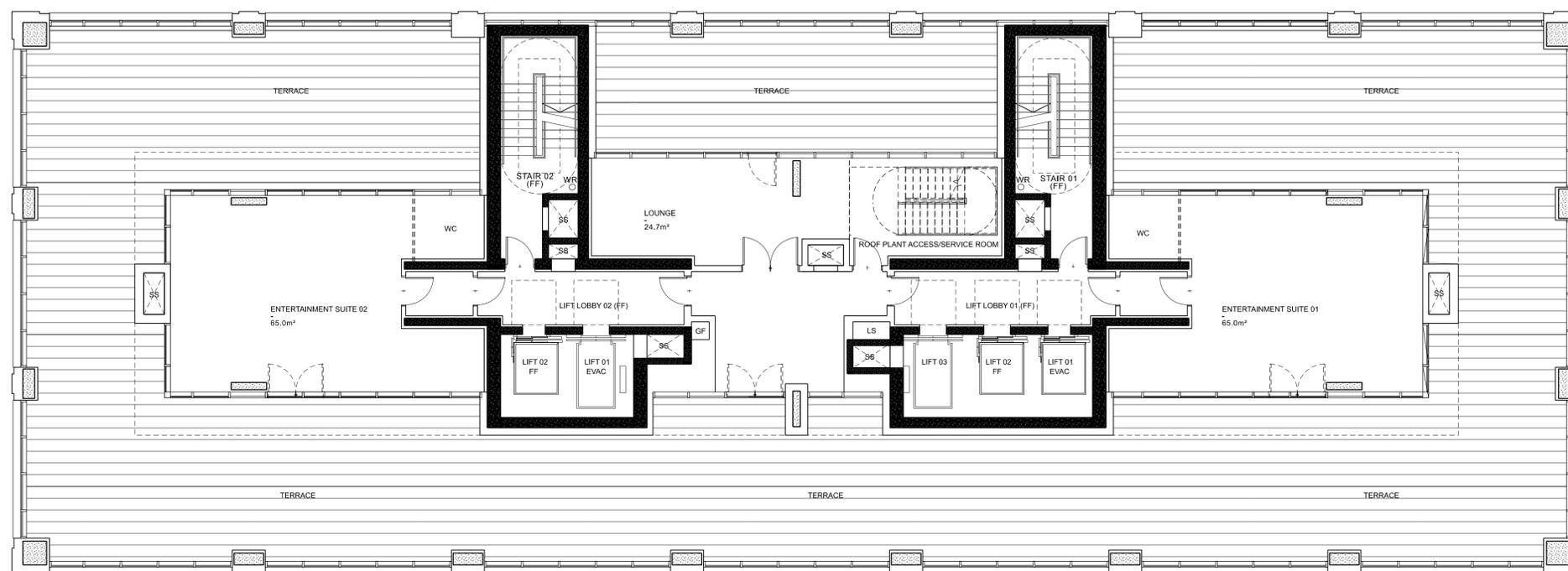
STATUS:
Information

PROJECT: 06159 DRAWING NO: 5PA-B1-XX-DR-A-022202 REV: 01

KEY PLAN:



ROOF LEVEL 50TH - LIFTS MACHINE ROOMS



49TH ROOF TERRACE

01	07/07/25	WIP - Issue for information
0	01/07/25	WIP - Issue for information



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Manchester, M1 1FN

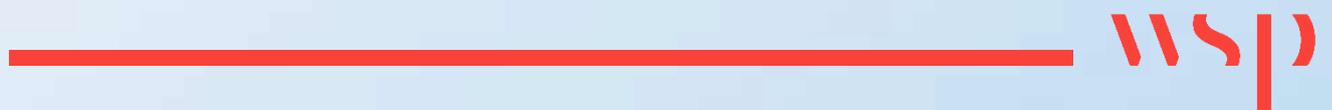
London, 0207 253 7644
The Leadenhall Market, Warden Street,
London SE1 3ER

PROJECT: Central Square Cardiff
www.5plusarchitects.com

TITLE:	Proposed General Arrangement Roof Terrace and Roof		
SCALE:	ORIGIN DATE:	DRAWN:	CHECKED:
1:100@A1	01.07.25	AG	ATa
STATUS:	Information		
PROJECT:	DRAWING NO.:	REV.:	
06159	5PA-B1-XX-DR-A-022203	01	

Appendix E

TRICS ASSESSMENT



Calculation Reference: AUDIT-100312-250717-0746

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : C - FLATS PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE

Selected regions and areas:

01	GREATER LONDON	
	BM BROMLEY	1 days
	HM HAMMERSMITH AND FULHAM	1 days
05	EAST MIDLANDS	
	NG NOTTINGHAM	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: No of Dwellings
Actual Range: 46 to 194 (units:)
Range Selected by User: 0 to 724 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 05/09/24

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday 2 days
Tuesday 1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count 3 days
Directional ATC Count 0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Town Centre 3

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Built-Up Zone 3

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included 3 days - Selected
Servicing vehicles Excluded X days - Selected

Secondary Filtering selection:

Use Class:

C3 3 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

25,001 to 50,000	1 days
50,001 to 100,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

250,001 to 500,000	1 days
500,001 or More	2 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	2 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	1 days
No	2 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	1 days
6a Excellent	1 days
6b (High) Excellent	1 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	BM-03-C-01 RINGER'S ROAD BROMLEY	BLOCKS OF FLATS		BROMLEY
	Town Centre Built-Up Zone Total No of Dwellings:		160	
	<i>Survey date: MONDAY</i>		<i>12/11/18</i>	<i>Survey Type: MANUAL</i>
2	HM-03-C-02 GLENTHORNE ROAD HAMMERSMITH	BLOCKS OF FLATS		HAMMERSMITH AND FULHAM
	Town Centre Built-Up Zone Total No of Dwellings:		194	
	<i>Survey date: TUESDAY</i>		<i>30/04/19</i>	<i>Survey Type: MANUAL</i>
3	NG-03-C-03 CANAL STREET NOTTINGHAM	BLOCK OF FLATS		NOTTINGHAM
	Town Centre Built-Up Zone Total No of Dwellings:		46	
	<i>Survey date: MONDAY</i>		<i>02/10/23</i>	<i>Survey Type: MANUAL</i>

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
 MULTI-MODAL TOTAL PEOPLE
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period
 Total People to Total Vehicles ratio (all time periods and directions): 4.79

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	133	0.055	3	133	0.393	3	133	0.448
08:00 - 09:00	3	133	0.083	3	133	0.515	3	133	0.598
09:00 - 10:00	3	133	0.087	3	133	0.180	3	133	0.267
10:00 - 11:00	3	133	0.113	3	133	0.142	3	133	0.255
11:00 - 12:00	3	133	0.087	3	133	0.122	3	133	0.209
12:00 - 13:00	3	133	0.098	3	133	0.095	3	133	0.193
13:00 - 14:00	3	133	0.105	3	133	0.128	3	133	0.233
14:00 - 15:00	3	133	0.107	3	133	0.100	3	133	0.207
15:00 - 16:00	3	133	0.165	3	133	0.130	3	133	0.295
16:00 - 17:00	3	133	0.203	3	133	0.105	3	133	0.308
17:00 - 18:00	3	133	0.253	3	133	0.110	3	133	0.363
18:00 - 19:00	3	133	0.438	3	133	0.172	3	133	0.610
19:00 - 20:00	2	177	0.322	2	177	0.113	2	177	0.435
20:00 - 21:00	2	177	0.153	2	177	0.090	2	177	0.243
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.269			2.395			4.664

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Calculation Reference: AUDIT-100312-250718-0732

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 06 - HOTEL, FOOD & DRINK
Category : C - PUB/RESTAURANT

MULTI-MODAL TOTAL PEOPLE

Selected regions and areas:

01	GREATER LONDON	
	IS ISLINGTON	1 days
	LB LAMBETH	1 days
	WE WESTMINSTER	1 days
05	EAST MIDLANDS	
	LR LEICESTER	1 days
06	WEST MIDLANDS	
	WO WORCESTERSHIRE	1 days
08	NORTH WEST	
	GM GREATER MANCHESTER	1 days
	LC LANCASHIRE	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area
 Actual Range: 220 to 637 (units: sqm)
 Range Selected by User: 200 to 2384 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 10/10/23

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	1 days
Tuesday	1 days
Wednesday	3 days
Thursday	1 days
Friday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	7 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Town Centre	7
-------------	---

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Retail Zone	1
Built-Up Zone	4
High Street	2

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	3 days - Selected
Servicing vehicles Excluded	4 days - Selected

Secondary Filtering selection:

Use Class:

Sui Generis	7 days
-------------	--------

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS@.

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

25,001 to 50,000	4 days
50,001 to 100,000	3 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

125,001 to 250,000	2 days
500,001 or More	5 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	5 days
1.1 to 1.5	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	7 days
----	--------

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	4 days
6a Excellent	2 days
6b (High) Excellent	1 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	GM-06-C-05 DEANSGATE MANCHESTER	PUB/RESTAURANT		GREATER MANCHESTER
	Town Centre Built-Up Zone Total Gross floor area:		405 sqm	
	<i>Survey date: MONDAY</i>		<i>18/09/23</i>	<i>Survey Type: MANUAL</i>
2	IS-06-C-03 ISLINGTON HIGH STREET ANGEL	PUB/RESTAURANT		ISLINGTON
	Town Centre High Street Total Gross floor area:		288 sqm	
	<i>Survey date: FRIDAY</i>		<i>16/09/22</i>	<i>Survey Type: MANUAL</i>
3	LB-06-C-01 CORNWALL ROAD WATERLOO	PUB/RESTAURANT		LAMBETH
	Town Centre Built-Up Zone Total Gross floor area:		220 sqm	
	<i>Survey date: WEDNESDAY</i>		<i>22/06/16</i>	<i>Survey Type: MANUAL</i>
4	LC-06-C-04 ST JAMES STREET BURNLEY	PUB/RESTAURANT		LANCASHIRE
	Town Centre Built-Up Zone Total Gross floor area:		600 sqm	
	<i>Survey date: THURSDAY</i>		<i>29/09/16</i>	<i>Survey Type: MANUAL</i>
5	LR-06-C-01 CHARLES STREET LEICESTER	PUB/RESTAURANT		LEICESTER
	Town Centre Retail Zone Total Gross floor area:		500 sqm	
	<i>Survey date: WEDNESDAY</i>		<i>04/10/23</i>	<i>Survey Type: MANUAL</i>
6	WE-06-C-01 DRURY LANE COVENT GARDEN	PUB/RESTAURANT		WESTMINSTER
	Town Centre Built-Up Zone Total Gross floor area:		637 sqm	
	<i>Survey date: TUESDAY</i>		<i>10/10/23</i>	<i>Survey Type: MANUAL</i>
7	WO-06-C-03 THE TYTHING WORCESTER	PUB/RESTAURANT		WORCESTERSHIRE
	Town Centre High Street Total Gross floor area:		250 sqm	
	<i>Survey date: WEDNESDAY</i>		<i>23/11/16</i>	<i>Survey Type: MANUAL</i>

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 6.13

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	600	0.000	1	600	0.000	1	600	0.000
08:00 - 09:00	1	600	0.000	1	600	0.000	1	600	0.000
09:00 - 10:00	1	600	0.000	1	600	0.000	1	600	0.000
10:00 - 11:00	3	357	0.187	3	357	0.187	3	357	0.374
11:00 - 12:00	6	400	0.583	6	400	0.208	6	400	0.791
12:00 - 13:00	6	400	5.417	6	400	2.542	6	400	7.959
13:00 - 14:00	6	400	5.042	6	400	4.333	6	400	9.375
14:00 - 15:00	7	414	5.241	7	414	4.655	7	414	9.896
15:00 - 16:00	7	414	6.552	7	414	6.828	7	414	13.380
16:00 - 17:00	7	414	4.759	7	414	5.655	7	414	10.414
17:00 - 18:00	7	414	8.345	7	414	5.690	7	414	14.035
18:00 - 19:00	7	414	10.172	7	414	7.172	7	414	17.344
19:00 - 20:00	7	414	9.483	7	414	7.172	7	414	16.655
20:00 - 21:00	7	414	5.931	7	414	6.414	7	414	12.345
21:00 - 22:00	7	414	4.931	7	414	7.345	7	414	12.276
22:00 - 23:00	7	414	1.586	7	414	5.241	7	414	6.827
23:00 - 24:00	7	414	0.448	7	414	3.724	7	414	4.172
Total Rates:			68.677			67.166			135.843

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.



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