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# **Royal Mail Patcham Court Farm Delivery Office**

Equality Impact Assessment

June 2023

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Mott MacDonald  
Floor 3  
1 Whitehall Riverside  
Leeds LS1 4BN  
United Kingdom

T +44 (0)113 394 6700  
mottmac.com

# **Royal Mail Patcham Court Farm Delivery Office**

## **Equality Impact Assessment**

June 2023

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# Executive summary

## Overview

Mott MacDonald has been commissioned by Royal Mail Group (RMG) to undertake an Equality Impact Assessment (EqIA) of the proposed access and parking, hereafter referred to as 'the Scheme', for the operation of a new Delivery Office ('the DO') on the site of Patcham Court Farm located off Vale Avenue in Brighton ('the Site').

## About the EqIA

The scope of this EqIA is to identify the potential accessibility and inclusion effects likely to be experienced by RMG staff during operation of the Scheme in light of their 'protected characteristics', as defined under the Equality Act 2010.

The protected characteristics are: age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion and belief, sex, and sexual orientation.

The report uses best practice, standards, and guidance to provide a detailed review of design features and provides an analysis on the accessibility and inclusivity of key Scheme features.

The EqIA identifies any disproportionate effects (both positive and negative) on people with protected characteristics that may arise when using the Scheme. It sets out any embedded mitigation that the RMG and its project partners have put in place throughout design and development process to mitigate any operational risk and makes recommendations of further actions required during detailed design.

## Approach to the EqIA

The EqIA considers the impacts of the proposed Scheme on staff during operation. Consideration of the impacts of the proposed Scheme on the public during construction and operation is not within the scope of this EqIA.

The assessment of effects across the EqIA process is predominantly qualitative and considers, where possible and applicable:

- whether the Scheme will have a positive or negative effect;
- the severity of the impact; and
- the capacity of the affected groups to absorb the impacts (their resilience).

## Findings of the EqIA

This assessment identifies that without implementing the mitigations recommended within this report, the proposed access and parking design has the potential to cause adverse equality effects for some members of staff during operation.

This assessment has identified that there are several Scheme design elements which are non-compliant with accessibility and inclusive design standards. Without mitigation, these are anticipated to result in adverse equality impacts for disabled staff and staff who may have reduced mobility such as older people and pregnant women.

This assessment has also identified that there are several Scheme design elements which may have an adverse effect on feelings of safety and security when using the Site. Without mitigation, the adverse equality impacts are anticipated to affect staff who are older, disabled, from minority faith groups, ethnic minority groups, LGBT+ groups and women.

The Scheme is at an early stage of design development; therefore it is anticipated that these non-compliances and potential adverse effects will be addressed at later stages of the design process. Moreover, it is recognised that some of these non-compliances are outside the scope of RMG and therefore may not be possible to achieve through the Scheme. Nevertheless, RMG will work alongside Brighton and Hove Council and local bus networks to improve outcomes for staff.

# 1 Introduction

## 1.1 Overview

Mott MacDonald has been commissioned by Royal Mail Group (RMG) to undertake an Equality Impact Assessment (EqIA) of the access and parking proposed as part of a new Delivery Office ('the DO') on the site of Patcham Court Farm off Vale Avenue in Brighton ('the Site'), hereafter referred to as 'the Scheme'. The DO will consolidate two existing DOs at North Road, Brighton (approximately 450 metres south of Brighton Railway Station) and Denmark Villas, Hove.

This report provides the context of the Scheme, the requirements of the Equality Act 2010 ('the Equality Act'), and the potential accessibility and inclusion effects likely to be experienced by RMG staff during operation of the Scheme in light of their 'protected characteristics', as defined under the Equality Act.

Protected characteristics include the following (as defined by the Equality Act): age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion and belief, sex, and sexual orientation.<sup>1</sup>

The report then outlines the findings of the assessment and provides recommendations for mitigation and further enhancement for beneficial impacts where appropriate.

## 1.2 The Equality Impact Assessment

### 1.2.1 The Equality Act

The Equality Act legally protects people from discrimination in the workplace and in wider society. The Equality Act is intended to support good decision-making, supported by an understanding of how different people will be affected by the activities of public and private bodies. This helps to ensure projects, services and workplaces are appropriate and accessible to all and meet different people's needs.

It is therefore good practice under equality legislation to consider the accessibility and inclusivity of the design of the built environment and its impact on vulnerable groups. Moreover, RMG is legally obligated under the Equality Act to make reasonable adjustments which place disabled employees at a disadvantage. EqIA and the protected characteristic groups set out under the Equality Act provide a framework through which this assessment can be undertaken. Whilst an EqIA is not a legal requirement for a private development, undertaking this assessment demonstrates RMG's commitment to equality and best practice with regard to accessibility and inclusion.

Given the nature of this development, there are no publicly accessible areas proposed. Therefore, impacts are only considered for staff who are part of a protected characteristic group, during the operational phase of the new DO.

### 1.2.2 Assessing equality effects

By understanding the effect of their activities on different people, and how inclusive delivery can support and open up opportunities, organisations can be more efficient and effective.

Employers should minimise disadvantages experienced by employees due to their protected characteristics, take steps to meet the different needs of people from protected groups, and

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<sup>1</sup> Government Equalities Office/Home Office (2010): 'Equality Act 2010' Available at: [www.legislation.gov.uk](http://www.legislation.gov.uk)



encourage participation from these groups where participation is disproportionately low. Undertaking equality analysis such as an EqIA helps to demonstrate how an employer is working to minimise disadvantages experienced by people due to their protected characteristics by:

- providing a written record of the equality considerations which have been taken into account;
- ensuring that decision-making includes a consideration of the action that would help to avoid or mitigate any negative impacts on particular protected groups; and
- supporting evidence-based and more transparent decision-making.

### 1.2.3 Protected characteristics

An EqIA provides a systematic assessment of the likely or actual effects of policies or proposals on social groups with the following protected characteristics (as defined by the Equality Act):

**Table 1.1: Protected characteristics definition**

Protected characteristic	Equality and Human Rights Commission (EHRC) definition
Age	A person belonging to a particular age (for example 32-year olds) or range of ages (for example 18 to 30-year olds).
Disability	A person has a disability if she or he has a physical or mental impairment which has a substantial and long-term adverse effect on that person's ability to carry out normal day-to-day activities.
Gender reassignment	The process of transitioning from one sex to another.
Marriage and civil partnership	Marriage is a union between a man and a woman or between a same-sex couple. Same-sex couples can also have their relationships legally recognised as 'civil partnerships'. Civil partners must not be treated less favourably than married couples (except where permitted by the Equality Act).
Pregnancy and maternity	Pregnancy is the condition of being pregnant or expecting a baby. Maternity refers to the period after the birth, and is linked to maternity leave in the employment context. In the non-work context, protection against maternity discrimination is for 26 weeks after giving birth, and this includes treating a woman unfavourably because she is breastfeeding.
Race	Refers to the protected characteristic of race. It refers to a group of people defined by their race, colour, and nationality (including citizenship) ethnic or national origins.
Religion and belief	Religion refers to any religion, including a lack of religion. Belief refers to any religious or philosophical belief and includes a lack of belief. Generally, a belief should affect your life choices or the way you live for it to be included in the definition.
Sex	A man or a woman
Sexual orientation	Whether a person's sexual attraction is towards their own sex, the opposite sex or to both sexes.

Source: Equality Act, 2010 and Equality and Human Rights Commission, 2021

For the purposes of this EqIA, groups with protected characteristics have been identified based on the desk-based evidence review to improve the assessment.

- Within 'age', all age ranges are considered, but specific sub-groups include younger people (aged 16-24 years), and older people (aged 65 or over).
- Within 'race', all races and ethnicities are considered, but the sub-group of ethnic minority is identified to refer to non-White British communities.
- Within 'religion and belief', all religious and belief groups are considered, but the term 'minority faith groups' refers to religious groups who are not Christian (Buddhist, Hindu, Jewish, Muslim, Sikh, and 'other').
- Within 'sexual orientation' and 'gender reassignment', all sexual orientations and gender statuses are considered, but the 'Lesbian, Gay, Bisexual, Transgender +' (LGBT+) community is considered together.
- Within 'sex', the sub-groups of men and women are used.

- Within 'pregnancy and maternity', pregnant women are reported as a sub-group where the effect only relates to pregnancy.

The analysis determines the likely or actual effects of the Scheme during operation on staff belonging to protected characteristic groups by:

- Assessing whether staff belonging to one or more of these groups could experience differential effects (whether effects are likely to be experienced differently to other members of the general population) as a result of the Scheme.
- Assessing whether staff belonging to one or more of these groups could experience disproportionate effects (over and above the effects likely to be experienced by the rest of the population) as a result of the Scheme.
- Identifying opportunities to promote equality more effectively.
- Developing ways in which any disproportionate negative impacts could be removed or mitigated to prevent any unlawful discrimination and minimise inequality of outcomes.

### 1.3 Approach to the EqIA

The EqIA follows a four step approach under which the following tasks were undertaken to deliver the assessment:

#### 1.3.1 Understanding the project

A review of the Scheme was undertaken, including available documentation associated with the Scheme proposals.

#### 1.3.2 Reviewing the evidence

A high-level desk-based evidence and literature review was undertaken to better understand the potential risks and opportunities arising from the Scheme on accessibility and inclusivity. This allowed for the characterisation of potential risks and opportunities typically associated with parking, access and pedestrian environment design, to understand whether they applied in this instance.

Engagement with the design team has been undertaken to discuss design proposals and how findings will be addressed. It is recommended that engagement is undertaken with a representative from RMG's EDI team to understand the needs and requirements of staff with protected characteristics.

#### 1.3.3 Impact assessment

An assessment of potential impacts was then undertaken. Potential impacts were examined using the research undertaken in the stages above. Assessment of equality impacts was undertaken in light of the sensitivity of the affected parties to the proposed Scheme. Any potential impacts were identified in the context of the mitigation measures implemented by the Royal Mail Group.

### 1.3.4 Action Planning

Further recommendations have been made, based on the impacts identified, and any conclusions drawn. Further recommendations were developed to help manage the Scheme development and the impacts identified for staff.

## 1.4 Methodology for identifying and assessing equality effects

### 1.4.1 Assessing equality effects

The assessment of effects across the EqIA process is predominantly qualitative and outlines the nature of the impact on staff accessing the DO and using the parking facilities during operation.

The assessment considers, where possible and applicable:

- whether the Scheme will have a positive or negative effect;
- the severity of the impact; and
- the capacity of the affected groups to absorb the impacts (their resilience).

### 1.4.2 Types of equality effects considered

Potential effects arising from the Scheme will be assessed as either differential or disproportionate.

- **Differential effects** occur where people with protected characteristics are likely to be affected in a different way to other members of the general population. This may be because groups have specific needs or are more susceptible to the effect due to their protected characteristics. Differential effects are not dependent on the number of people affected.
- **Disproportionate effects** occur where there is likely to be a comparatively greater effect on people from a particular protected characteristic group than on other members of the general population. Disproportionate effects may occur if the affected community comprises of a higher than average proportion of people with a particular protected characteristic, or because people from a particular protected characteristic group are the primary users of an affected resource.

## 1.5 Standards and guidelines

The Scheme has been assessed against UK equality legislation, specifically:

- Equality Act 2010 (2010), Government Equalities Office/Home Office

The Scheme has also been assessed against the following best practice Inclusive Design standards and guidelines:

- BS 8300-1 – Design of an accessible and inclusive built environment Part 1: External environment – Code of practice (2018), British Standards Institution
- BS 8300-2 – Design of an accessible and inclusive built environment Part 2: Buildings – Code of practice (2018), British Standards Institution
- PAS 6463– Design for the mind – Neurodiversity and the built environment – Guide (2022),
- The Sign Design Guide (2004), Sign Design Society
- BS 5489-1 Code of Practice for the Design of Road Lighting Part 1: Lighting of Roads and Public Amenity Areas (2022), British Standards Institution

## 2 Patcham Court Farm DO context

### 2.1 Overview of Patcham Court Farm DO

The new DO will be constructed to the north of Vale Avenue on land currently occupied by Patcham Court Farm. The DO will consolidate two existing DOs elsewhere in Brighton and Hove, one at North Road, Brighton (approximately 450 metres south of Brighton Railway Station) and Denmark Villas, Hove.

#### 2.1.1 Study area

The proposed access for the DO is located off Vale Avenue, approximately 6.5 km north of Brighton city centre. The site is bounded by the A27 (westbound) to the north, allotments to the east, Vale Avenue to the south, and trees bordering the A27 exit road to the west. The site is located within Patcham, a residential area approximately 5 km north of Brighton city centre. The site is approximately 1.56 hectares (ha), is vacant and contains several, mainly derelict, low-rise agricultural buildings and hardstanding.

The site location is displayed in Figure 2.1.

**Figure 2.1: Site location**



Source: Mott MacDonald (2023) Royal Mail Brighton Delivery Office Travel Plan (Figure 2.1) <sup>2</sup>

<sup>2</sup> Mott MacDonald (2022) Royal Mail Brighton Delivery Office Travel Plan. Available at: [BH2022\\_02232-TRAVEL\\_PLAN\\_REV\\_B-18723621.pdf](https://www.brighton-hove.gov.uk/BH2022_02232-TRAVEL_PLAN_REV_B-18723621.pdf) (brighton-hove.gov.uk)

## 2.2 Scheme background

The new DO seeks to amalgamate Royal Mail's operations within Brighton and Hove. This is to streamline Royal Mail's procedures. The existing sites will then become available for appropriate redevelopment.

The site is a former agricultural holding although many of the buildings are now in disrepair and have been vacant for a number of years. The access point is currently gated to provide security for the buildings. The site rises from south to the north with a level change of approximately 7m between these boundaries.

The proposed building will comprise 4,145 sqm of floorspace, with ancillary offices, a service yard, car and HGV parking, and site access. Incoming mail will be delivered by HGVs before being distributed out during the daytime by the RMG fleet. It is not expected that the facility will include a Customer Service Point and as such, no publicly accessible areas are proposed.

In the context of this EqIA, the Scheme refers solely to the access and parking proposed as part of the design for the operational phase of the new DO.

## 2.3 The Scheme

Figure 2.2 shows the general arrangement plan for the DO site.

**Figure 2.2: Site general arrangement plan**



Source: HLM Architects 2023

### 2.3.1 Proposed access

This section sets out the proposed access for vehicles, pedestrians, and cyclists. The site will be secured for safety purposes, and this will be achieved through a combination of automated barriers across the roadway to the operational parking (refer to Section 2.3.2) and a palisade fence around the external boundary of the Site.

#### Vehicle

Vehicular access will be via a junction on Vale Avenue. The access road will run parallel with Vale Avenue before turning northwards along the eastern elevation of the building.

#### Pedestrian

Pedestrian access will be provided from Vale Avenue, opposite the Vale Avenue/Church Hill junction. An uncontrolled dropped kerb crossing over Vale Avenue will be provided to the east



of the pedestrian site access. This will include tactile paving and will provide a pedestrian crossing point over Vale Avenue. The crossing point is located to the east of Church Hill for multiple reasons:

1. To avoid the southern side of the crossing being blocked from view for eastbound traffic in the event a vehicle is waiting to turn right into the site
2. To avoid siting the crossing outside a residential access on Vale Avenue and also so that pedestrians can continue southbound.
3. Siting it to the west means a second crossing of Church Hill has to be made as the footway ends on the west side. That crossing point would also be outside a driveway.

There are pedestrian footways on both sides of Vale Avenue, which measure approximately 1 metre in usable width and approximately 3 metres in total width including grass verges that abut the carriageway.

Stairs will be provided to overcome the elevation change between the Vale Avenue footway and the site, and a ramp will be provided for disabled access.

A series of three crossings between the stairs/ramp and main entrance will be provided across the vehicle access road and car park. Crossings between the operational car parking spaces and the eastern entrance of the DO building will also be provided, along with an access ramp from these crossings to the eastern building entrance.

## Cycle

Cycle access is through the main site access junction, to the cycle parking located to the east of the main building entrance.

### 2.3.2 Proposed parking

Parking provision for the Site is divided into staff and operational parking provisions. A breakdown of the parking numbers proposed for the DO is provided in Table 2.1.

Staff parking is intended for the private vehicles of staff commuting to the Site and is accessed from the main route through the Site. 64 car spaces are proposed directly to the front of the building, with a further 21 to the east. Of these, four will be designated disabled spaces and 20 electric charging points will be provided. The staff parking area will also include 20 motorcycle spaces. There will also be two cycle storage sheds.

Operational parking is intended for RMG HGV and red fleet vehicles. This parking will be located to the east and north of the DO building accessed via the vehicular access road. Operational parking is proposed to be in a secured area separated from the staff parking provision by a barrier control system.

**Table 2.1: Proposed parking provision**

Parking Area	Type of Parking	Number of Spaces	Percentage
Staff Car Park	<b>Total Car Parking</b>	<b>85</b>	
	Disabled Spaces (included within total spaces) – including 1 Electric Vehicle charging disabled space	4	4.7%
	Electric Vehicle Charging (included within total spaces) – standard size	20	23.5%
	Motorcycle spaces	20	15.2%
	<b>Total Operational Parking</b>	<b>132</b>	

Parking Area	Type of Parking	Number of Spaces	Percentage
Operational Car Park	Operational Electric Vehicle Charging (included within total spaces)	129	97.7%
	7.5t van spaces	2	2%
Cycle Parking	Total cycle parking	40	

Source: HLM Architects 2023

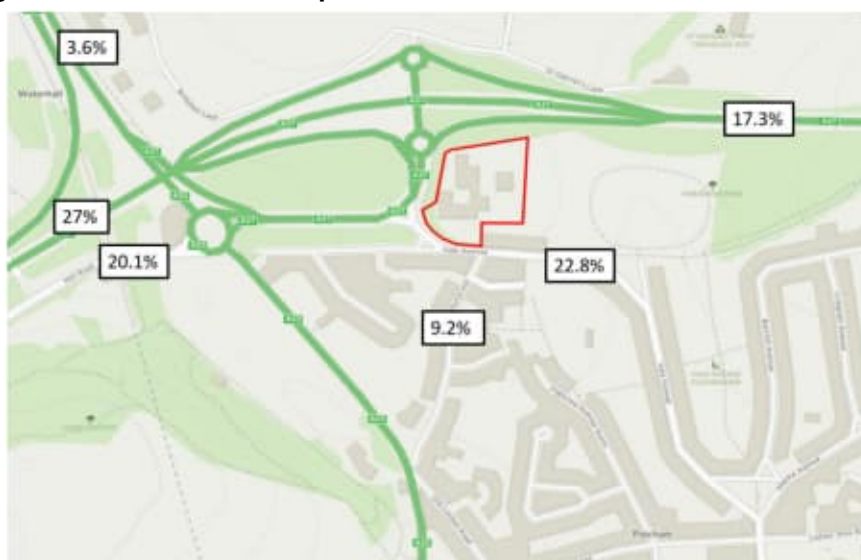
## 2.4 Summary of Transport Assessment

The following information is summarised from the Transport Assessment undertaken by Mott MacDonald in July 2022.<sup>5</sup>

In normal day-to-day operation, there will be a maximum of approximately 240 staff at the DO site at any given time. The site will operate on a 24-hour basis. The weekday trip generation and hourly profile for staff trips, HGV delivery and red fleet trips were provided by RMG and are based on the trips generated by the existing DOs at North Road, Brighton and Denmark Villas, Hove. This analysis has been used to generate a forecasted trip generation for the new DO, the results of which are summarised below.

**Staff trips:** There are two clear staff trip generation peaks at the site – between 06:00 and 07:00 and between 14:00 and 15:00. These peaks align with staff shift patterns. A staff travel survey was undertaken at the existing Brighton and Hove offices for three weeks between Friday 4th March 2022 and Friday 25th March 2022. The data obtained in this survey has been used to forecast the modal split for staff trips generated by the proposed development. The results indicate that the most popular expected choice of travel to Patcham is likely to be car (driver), with 46% of staff selecting this. The staff forecast vehicle trip distribution is shown in in Figure 2.2. This shows that the majority of trips will be via the A27 west and east (27% and 17.3%), Mill Road (20.1%) and Vale Avenue east (22.8%).

**Figure 2.3: Forecast staff trips**



Source: Mott MacDonald (2022) Royal Mail Brighton Delivery Office Transport Assessment (Figure 5.4)

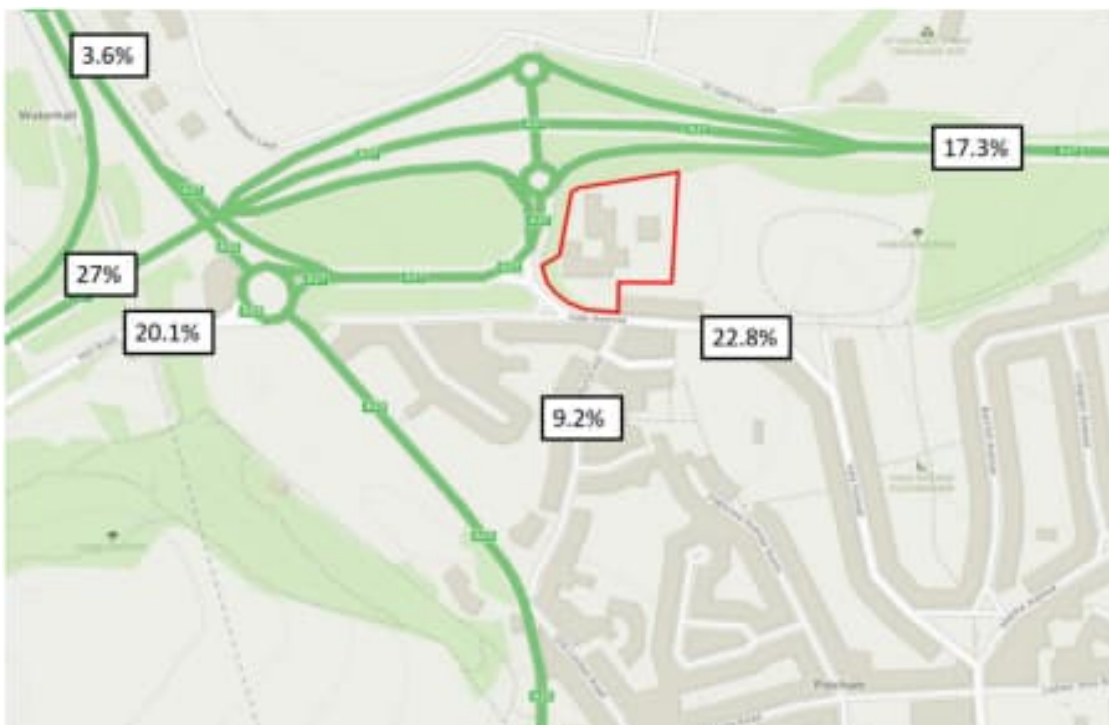
<sup>5</sup> Mott MacDonald (2022) Royal Mail Brighton Delivery Office Transport Assessment. Available at: [https://planningapps.brighton-hove.gov.uk/online-applications/files/CE0AA7E5B9A7FF76E394B6A534A625BA/pdf/BH2022\\_02232-TRANSPORT\\_ASSESSMENT\\_REV\\_B-18723620.pdf](https://planningapps.brighton-hove.gov.uk/online-applications/files/CE0AA7E5B9A7FF76E394B6A534A625BA/pdf/BH2022_02232-TRANSPORT_ASSESSMENT_REV_B-18723620.pdf)



**HGV delivery:** HGV delivery arrivals and departures are forecasted between 00:00 and 21:00 but the majority are forecasted to occur between 06:00 and 10:00. All HGV deliveries are forecast to travel to/from distribution centres to the north towards London and are therefore forecast to enter/exit the local highway network from A23 (north).

**Red fleet trips:** Red fleet trips are forecasted to occur between 07:00 and 19:00, with the majority occurring between 09:00 and 15:00. Red fleet vehicles will be banned from using Church Hill, and therefore, no trips are forecast to use this road. As shown in Figure 2.3 below, the majority of red fleet trips will be made via Mill Road (45.2%) and Vale Avenue east (37.6%).

**Figure 2.4: Forecast Red Fleet trips**



Source: Mott MacDonald (2022) Royal Mail Brighton Delivery Office Transport Assessment (Figure 5.5) <sup>6</sup>

The Transport Assessment also concluded that:

- The pedestrian trips generated by the proposed development are forecast to have no impact on the operation of the local pedestrian network and footways.
- The bus trips generated by the proposed development are forecast to have a negligible impact on the capacity of bus services. It is assumed that the existing bus provision has sufficient capacity to accommodate the bus trips generated by the proposed development and RMG will engage with local bus companies to facilitate access to the site by public transport.
- The rail trips generated by the proposed development are forecast to have no impact on the operation of rail services from local train stations.
- The vehicle trips generated by the proposed development are forecast to have a negligible impact on the operation of the local transport network. Therefore, no further mitigation is required to improve the operation of the junctions assessed.

<sup>6</sup> Mott MacDonald (2022) Royal Mail Brighton Delivery Office Travel Plan. Available at: [BH2022\\_02232-TRAVEL\\_PLAN\\_REV\\_B-18723621.pdf \(brighton-hove.gov.uk\)](#)

## 3 Summary of design considerations

### 3.1 Summary

The Scheme will affect the mobility and inclusion of RMG staff working at the DO. Impacts on accessibility and inclusion can affect all parts of the community but would be anticipated to have a disproportionately negative effect on staff who are older, pregnant, and disabled. Whilst no publicly accessible areas are proposed given the nature of the development, everybody accessing the DO will be required to cross the car park as pedestrians to reach the building entrance, whether that is from a vehicle parked within the car park or from Vale Avenue as a pedestrian.

Table 3.1 below sets out a summary of anticipated risks and opportunities, based on the literature review provided in Appendix A, which could result in equality effects for protected characteristic groups. A full assessment of potential equality effects, based on the risks and opportunities identified below, is provided in Chapter 4.

**Table 3.1: Summary of risks and opportunities**

Risks and opportunities	Protected groups potentially affected
<b>Accessibility, inclusion and mobility</b>	
<b>Car park design</b>	
<ul style="list-style-type: none"> <li>There is limited research relating to how car park design can affect the accessibility, inclusion and mobility protected characteristic groups.</li> <li>However it is well recognised that the design and location of parking should ensure that parking options and choices are provided for <b>disabled people and people with reduced mobility</b>, such as <b>older people</b> and <b>pregnant women</b>.</li> </ul>	<ul style="list-style-type: none"> <li>Older people</li> <li>Pregnant people</li> <li>Disabled people</li> <li>People with reduced mobility</li> </ul>
<b>Pedestrian environment design</b>	
<ul style="list-style-type: none"> <li><b>Older people</b> and <b>disabled people</b> with mobility and visual impairments are likely to be reliant on an accessible, well-maintained, and consistent pedestrian environment to ensure they can make journeys safely and confidently. Research shows that <b>aging</b> and <b>vision impairment</b> increase the risk of falls and approximately one third of older people fall at least once a year.<sup>7</sup></li> <li>A poor layout can generate confusion and stress, as well as physical accidents, such as falls, for <b>older or less mobile users</b><sup>8</sup>, as well as for <b>people with neurodiversity or autism</b>.<sup>9</sup></li> <li>Full step-free access through appropriate gradients can improve accessibility for people with reduced mobility such as <b>older people</b> and <b>pregnant women</b>, and <b>people with disabilities</b>. Many users that navigate steps, may still experience pain or discomfort when using them, particularly if the rise of each step is too high.<sup>10</sup></li> </ul>	<ul style="list-style-type: none"> <li>Older people</li> <li>People with reduced mobility</li> <li>People with visual impairments</li> <li>People with neurodiversity or autism</li> <li>Pregnant women</li> </ul>
<b>Layout, wayfinding, and accessibility</b>	
<ul style="list-style-type: none"> <li>The clarity of routes and positioning of key facilities is likely to impact <b>people with sensory and/or information processing differences</b> more than others, and this should be considered when designing layouts that affect walking routes and distances.<sup>11</sup></li> </ul>	<ul style="list-style-type: none"> <li>Disabled people</li> <li>People with sensory and/or information processing differences</li> <li>People with neurodiversity or autism</li> </ul>

<sup>7</sup> Hopewell S, Adedire O, Copsey BJ, Boniface GJ, Sherrington C, Clemson L, et al., 'Designing Vision-Friendly Living Environments (2019), Available at [Designing Vision-Friendly Living Environments - Lighthouse Guild](#)

<sup>8</sup> Rail Delivery Group (2015). 'On track for 2020? The future of accessible rail travel'

<sup>9</sup> British Standards Institution (2022). 'Design for the mind – Neurodiversity and the built environment – Guide'

<sup>10</sup> British Standards (2018) 'BS8300-1:2018 Design of an accessible and inclusive design environment'

<sup>11</sup> British Standards Institution (2022). 'Design for the mind – Neurodiversity and the built environment – Guide'

## Risks and opportunities

- Information provision and signage plays an important role for **disabled** passengers, especially when visiting a location for the first time. <sup>12</sup>
- The environment should also be free of unnecessary obstructions and be made simple to navigate in order to be made **autism** friendly. <sup>13</sup>
- Inconsistencies with the provision of information in visual formats can make travel particularly difficult for **people with hearing loss and people that use sign language**. <sup>14</sup>

## Protected groups potentially affected

- People with hearing loss and people that use sign language

## Feelings of safety and security

- **Older people** may feel more vulnerable at night and feel most at risk during 'walking and waiting' elements of their journeys. A proposed solution to this is to increase the use of good quality street lighting to contribute towards a safer travel environment after dark. <sup>15</sup>
- There is evidence to suggest that **people from an ethnic minority background** have greater concerns than White people about their personal safety and racial attacks when travelling, particularly at night. <sup>16</sup>
- **Women** are more likely to have security concerns as pedestrians than men, with almost two-thirds of women in the UK feeling unsafe walking alone. <sup>17</sup> Walkability of an area is also a fundamental factor in influencing the safety perceptions of women, influenced by lighting, clear signage and safety procedures. <sup>18</sup>
- People's **sexual orientation** is a likely factor in their decisions about the use of specific pedestrian corridors. Evidence shows that three in ten **LGBT+ people** might choose to adapt behaviour when deciding whether to walk down a certain street. <sup>19</sup>
- Parking facilities present particular challenges relating to safety and security, with research indicating that slower speeds can give users, both drivers and pedestrians, a false sense of security. Driver inattention is a key contributing factor resulting in vehicle crashes. <sup>20</sup>

- Older people
- People from ethnic minority groups
- LGBT+ groups
- Women

Table 3.2 below summarises best practice accessible and inclusive design guidance (refer to Section 1.5) for car parks, pedestrian environments, external wayfinding and designing for safety and security.

**Table 3.2: Summary of best practice design guidance**

### Accessibility, inclusion and mobility

#### Car park design <sup>21</sup>

- A designated setting-down point or picking-up point, suitable for disabled passengers, should be provided close to the accessible entrance to a building in addition to designated accessible parking spaces and taxi waiting zones.
- For workplaces where parking is provided, the minimum number of designated accessible spaces should be one space for each employee who is a disabled motorist, plus 5% of the total visitor capacity for visiting disabled motorists subject to a minimum of two spaces.
- Space should be available to enable a disabled motorist or passenger to open the car door fully, to get in or out of the vehicle, and to manoeuvre around vehicles.
- Where charging points for electric vehicles are provided, equivalent provision should be made for designated accessible spaces.

<sup>12</sup> Mackett, R (2017): 'Building Confidence – Improving travel for people with mental impairments

<sup>13</sup> Stephen Simpson (2015). 'Checklist for Autism-Friendly Environments'

<sup>14</sup> Action for Hearing Loss (2014): 'Access to rail travel for people with hearing loss: policy statement'

<sup>15</sup> DfT (2012): 'Transport solutions for older people: Information resource for Local Authorities'

<sup>16</sup> Department for Transport (2012): 'Transport for Everyone: an action plan to promote equality'

<sup>17</sup> Plan International (2016): 'Almost two thirds of women feel unsafe walking alone after dark'

<sup>18</sup> Department for Transport (2020) 'TAG Unit A4.1: Social Impact Appraisal'

<sup>19</sup> Bachmann, C and Gooch, B. (2017): 'LGBT in Britain: Hate Crime and Discrimination'

<sup>20</sup> National Safety Council. Parking Lot Injuries Often Result of Distraction. <https://www.nsc.org/road-safety/safety-topics/distracted-driving/parking-lot-safety>

<sup>21</sup> British Standards (2018) 'BS8300-1:2018 Design of an accessible and inclusive design environment'

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## Accessibility, inclusion and mobility

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- Where a number of cycle stands are provided, some of the cycle stands should be positioned to allow the parking of adapted cycles, which can be considerably larger than other cycles.
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### Pedestrian environment design

- Correct and consistent use of tactile paving is vital to ensuring a safe and accessible travel environment.<sup>22</sup>
  - A level resting platform approximately 1.8m long should be provided at least every 10m for ramps with a gradient of 1:20, and more often for ramps with steeper gradients.<sup>23</sup>
  - The maximum gradient in the direct line of travel should not exceed 1:12, and where space allows, a gradient of 1:20 should be achieved.<sup>24</sup>
  - A minimum width of 1.8m is required for pavements and walkways, although the width should be 2m wide, if possible, to ensure disabled access around buildings.<sup>25</sup>
- 

### Layout, wayfinding, and accessibility

- The clarity of routes and positioning of key facilities should be taken into account when designing layouts that affect walking routes and distances.<sup>26</sup>
  - Simple signs provide clear guidance about the route to take to reach the next stage of the journey and help to reassure the passenger.<sup>27</sup>
  - The environment should also be free of unnecessary obstructions and be made simple to navigate in order to be made **autism** friendly.<sup>28</sup>
  - Signs should be provided at the entrance to the car park and at each change in direction to direct motorists to the relevant designated accessible parking spaces.<sup>29</sup>
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## Feelings of safety and security

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Measures identified to improve feelings of safety and security in external environments and car parks include:

- Use of good quality street lighting to improve user visibility and opportunity for natural surveillance<sup>30</sup>
- CCTV provision along key pedestrian routes<sup>31</sup>
- Clear directional signage<sup>32</sup>
- Timely removal of litter and graffiti<sup>33</sup>

Spaces designed with a gendered perspective may be perceived by women and girls as safer, more inclusive and welcoming.<sup>34</sup>

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<sup>22</sup> DfT (2021): 'Inclusive Mobility: A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure'

<sup>23</sup> Sensory Trust (2017): 'Outdoor access guidance –ramps'

<sup>24</sup> DfT (2021): 'Guidance on the use of Tactile surfaces'

<sup>25</sup> British Standards Institution (2022). 'Design for the mind – Neurodiversity and the built environment – Guide'

<sup>26</sup> British Standards Institution (2022). 'Design for the mind – Neurodiversity and the built environment – Guide'

<sup>27</sup> Mackett, R (2017): 'Building Confidence – Improving travel for people with mental impairments'

<sup>28</sup> Stephen Simpson (2015). 'Checklist for Autism-Friendly Environments'

<sup>29</sup> British Standards (2018) 'BS8300-1:2018 Design of an accessible and inclusive design environment'

<sup>30</sup> British Standards (2018) 'BS8300-1:2018 Design of an accessible and inclusive design environment'

<sup>31</sup> HM Government (2021) 'Tackling violence against women and girls – the safety of women and girls across the country is our priority/ Available at: [Tackling violence against women and girls \(publishing.service.gov.uk\)](https://www.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/94444/tackling-violence-against-women-and-girls.pdf)

<sup>32</sup> British Parking Association – Park Mark (no date) Key issues for drivers. Available at: [Park Mark - Key Issues for Drivers](#)

<sup>33</sup> British Parking Association – Park Mark (no date) Key issues for drivers. Available at: [Park Mark - Key Issues for Drivers](#)

<sup>34</sup> World Bank (2020) 'Handbook for Gender-Inclusive Urban Planning and Design'. Available from: <https://www.worldbank.org/en/topic/urbandevelopment/publication/handbook-for-gender-inclusive-urban-planning-and-design>

## 4 Impact Assessment

### 4.1 Impact on accessibility, inclusion and mobility during operation

The following table describes the potential impacts of the Scheme on protected characteristic groups, with a focus on access, inclusion, mobility of staff during operation. These impacts have been identified through a review of the design, potential risks and opportunities and inclusive design standards.

**Table 4.1: Impact on accessibility, inclusion and mobility during operation**

Design element detailed design summary (including embedded mitigation)	Potential equality impacts and groups affected	Suggested further mitigation measures
<i>Staff access routes</i>		
<p><b>Access to the Site via public transport (bus)</b></p> <p>There are several bus stops located within an 800-metre walking distance. The nearest bus stops providing services in both directions are situated approximately 350 metres south of the site on Patcham Bypass, followed by the Barrhill Avenue bus stop (500 metres), and bus stops along Ladies Mile.</p> <p>The Patcham Bypass (A23 London Road) bus stops provide shelter, seating and timetable information. The Barrhill Avenue bus stop is a flagpole stop. Bus stops along Ladies Mile have a mixture of sheltered and unsheltered stops.</p> <p>From the northbound Patcham Bypass bus stop, staff would need to cross the bypass at an uncontrolled</p>	<p>The Patcham Bypass bus stops are broadly in line with best practice guidance for accessible and inclusive design<sup>35</sup>, however it is evident that both bus stops would benefit from enhancements such as clearer and bolder bus stop flags to <b>support staff with vision impairments</b> in identifying the locations of the bus stops.</p> <p>Staff using the Patcham Bypass bus stops will be required to travel approximately 225m uphill via Church Hill to access the Site on Vale Avenue. This uphill journey could result in an adverse equality effect for <b>disabled staff and those with reduced mobility including older people and pregnant women</b>.</p> <p>The pedestrian footways on the eastern side of Church Hill are non-compliant useable widths. This could result in an adverse equality effect for <b>disabled staff</b> accessing the DO who use a wheelchair or mobility scooter. <b>BS 8300- 1:8.2</b> advises that to be</p>	<p>It is recommended that the pedestrian footways on pedestrian routes from bus stops to the site are be revised in accordance with <b>BS 8300- 1:8.1 and BS 8300- 1:8.2</b> to ensure that they are sufficiently wide to accommodate larger electric mobility scooters. It is also recommended that existing bus stops anticipated to be used by staff are enhanced to be compliant with Department for Transport inclusive mobility best practice<sup>36</sup>, including bold and clear bus stop flags, shelters, seating and timetable information. However, it is recognised that these recommendations may be outside of the scope of RMG and therefore may not be possible to achieve through the Scheme.</p> <p>Whilst it is assumed that the existing bus provision has sufficient capacity to accommodate the bus trips generated by the proposed development, enhanced services and introducing bus stops closer to the Site would reduce uphill pedestrian journeys required by staff from existing bus stops to the Site.</p> <p>However, it is recognised that these recommendations may be outside of the scope of RMG and therefore may not be possible to achieve through the</p>

<sup>35</sup> DfT (2021) 'Inclusive Mobility – A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure'. Available at: [Inclusive Mobility. A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure \(publishing.service.gov.uk\)](#)

<sup>36</sup> DfT (2021) 'Inclusive Mobility – A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure'. Available at: [Inclusive Mobility. A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure \(publishing.service.gov.uk\)](#)

## Design element detailed design summary (including embedded mitigation)

## Potential equality impacts and groups affected

## Suggested further mitigation measures

<p>crossing and travel approximately 225m along Church Hill to access the Site.</p> <p>From the southbound Patcham Bypass bus stop, staff would not be required to cross the bypass however they would be required to cross Church Hill at a dropped kerb crossing since Church Hill only has a pedestrian footway on its eastern side.</p> <p>From the Barrhill Avenue bus stop, staff will need to travel 700m to access the Site. This will require travelling southwards to Warmdene Avenue and then northwards uphill along Vale Avenue.</p> <p>As outlined in Chapter 2, the bus trips generated by the proposed development are forecast to have a negligible impact on the capacity of bus services. It is assumed that the existing bus provision has sufficient capacity to accommodate the bus trips generated by the proposed development and RMG will engage with local bus companies to facilitate access to the site by public transport.</p>	<p>accessible, the minimum surface width of an access route should be at least 1.8m although a width of 2m is preferable.</p> <p>The Barrhill Avenue bus stop does not have a shelter, however since this bus stop is directly in front of a private property and is on a narrow pavement there may not be space to do so. This bus stop is also located on a sloped pavement which may present challenges for <b>staff using wheelchairs</b> when boarding or debarking a bus. No timetable information is available at this stop. This could result in an equality effect for those who may not have access to digital timetable information and this could also increase stress and anxiety for <b>neurodiverse staff</b> using the bus stop. There is no seating at this bus stop which could result in an adverse equality effect for <b>disabled staff and those with reduced mobility including older people and pregnant women</b>.</p> <p>The pedestrian footways on Barrhill Avenue and Vale Avenue are a non-compliant useable width due to the grass verges that abut the carriageway. This could result in an adverse equality effect for <b>disabled staff</b> accessing the DO who use a wheelchair or mobility scooter.</p> <p>Staff using the Barrhill bus stops will be required to make an uphill journey on Vale Avenue to access the Site and would be required to make an uphill journey when accessing the bus stop when leaving the Site. These uphill journeys could result in an adverse equality effect for <b>disabled staff and those with reduced mobility including older people and pregnant women</b>.</p> <p>Similarly to Barrhill and Vale Avenue, Ladies Mile has an incline that may be greater than inclusive design standards. There would likely be an adverse equality effect on uphill pedestrian journeys for <b>disabled staff and those with reduced mobility including older people and pregnant women</b>.</p>	<p>Scheme. Nevertheless, RMG will work alongside Brighton and Hove Council and local bus networks to improve this provision.</p> <p>These improvements would also be anticipated to have benefits for local residents.</p>
<p><b>Crossing from Vale Avenue</b></p>	<p>The pedestrian footways on both sides of Vale Avenue have a non-compliant useable width. This could result in an adverse equality effect for <b>disabled staff</b> accessing the DO who use a</p>	<p>The pedestrian footways on both sides of Vale Avenue should be revised in accordance with <b>BS 8300- 1:8.1 and BS 8300- 1:8.2</b> to ensure that they are sufficiently wide to accommodate larger electric mobility scooters. However, it is</p>



## Design element detailed design summary (including embedded mitigation)

## Potential equality impacts and groups affected

## Suggested further mitigation measures

There are pedestrian footways on both sides of Vale Avenue, which measure approximately 1m in usable width, with full width of off carriageway space being approximately 3m in total when including grass verge width.

An uncontrolled dropped kerb crossing over Vale Avenue will be provided to the east of the pedestrian site access. This will include tactile paving and will provide a pedestrian crossing point over Vale Avenue. The crossing point has been provided here rather than directly outside the pedestrian access due to visibility issues for oncoming traffic in the event that a vehicle is waiting to turn into the site. The crossing is also deliberately to the east of Church Hill so that peds can continue south. Siting it to the west means a second crossing of Church Hill has to be made as the footway ends on the west side. That crossing point would also be outside a driveway.

### Pedestrian footpath

A new footpath is proposed to the west of the DO vehicular entrance, running along Vale Avenue towards the DO vehicular access junction on Vale Avenue. The footpath width is approximately 2m wide with a proposed gradient 1:21 with level landings.

The footpath exit onto the vehicular access road has a dropped kerb to allow pedestrians to cross. It is currently unknown if tactile paving will be included within the dropped kerb design at this location. There are currently no plans for a controlled crossing at this location.

### Ramp access

The foot of the access ramp is located approximately 30m to the east of the DO vehicle access junction on Vale Avenue.

wheelchair or mobility scooter. **BS 8300- 1:8.2** advises that to be accessible, the minimum surface width of an access route should be at least 1.8m although a width of 2m is preferable.

The Scheme is not yet at a stage to produce information on the detailed design of the crossings. However if the crossing is not compliant with accessible and inclusive design best practice, this could result in an adverse equality impact for staff accessing the DO with **disabilities** and **those who may have reduced mobility, such as older people and pregnant women**.

The footpath width and gradient are compliant with **BS 8300- 1:8.1**, which advises that to be accessible, the minimum surface width of an access route should be at least 1.8m although a width of 2m is preferable.

There are currently no plans for a controlled crossing between this footpath and the pavement to the east of the vehicle access junction on Vale Avenue. Whilst there is a dropped kerb, the lack of controlled crossing, may cause a safety hazard as a result of vehicles turning into the junction from the A23 London Road. This could result in an adverse equality impact for the safety of those crossing the road, particularly **disabled staff with visual and hearing impairments** who may not see or hear vehicles turning into the junction.

The ramp width is compliant with **BS 8300- 1:8.2** which advises that the surface width of a ramp, between walls, upstands or kerbs, should not be less than 1.5m. The length of the ramp is compliant with **BS 8300- 1:9.2**.

recognised that this may be outside of the scope of RMG and therefore may not be possible to achieve through the Scheme. Nevertheless, RMG will work alongside Brighton and Hove Council to consider the betterment of pedestrian footways.

The uncontrolled dropped kerb crossing over Vale Avenue should be designed in accordance with the **Traffic Signs Manual (2019) Chapter 6 Traffic Control and Guidance on the Use of Tactile Paving (2021) and Department for Transport (2021) Inclusive Mobility – A Best Practice Guidance on Access to Pedestrian And Transport Infrastructure**.

Step-free access routes should be designed in accordance with **BS 8300- 1:8.1 and BS 8300- 1:8.2**.

The dropped kerbs should be designed in accordance with **BS 8300- 1:6.1**.

It is advised that a marked pedestrian crossing is positioned at the vehicular access road junction to connect the dropped kerbs between the pedestrian footpath and the Vale Avenue pavement to the east. Crossings should be designed in accordance with the **Traffic Signs Manual (2019) Chapter 6 Traffic Control**.

These improvements would also be anticipated to have benefits for local residents.

Design features such as rails should be designed in accordance with **BS 8300- 1:9.3**.

Access ramp gradients and landings should be designed in accordance with **BS 8300- 1:9.2**.

### Design element detailed design summary (including embedded mitigation)

### Potential equality impacts and groups affected

### Suggested further mitigation measures

The entrance to the access ramp is approximately 5m wide.

The ramp entrance point is located 8m to the west of the stepped access. The top of the ramp shares a landing with the top of the stepped access and leads to a marked pedestrian crossing across the DO vehicular access road.

The ramp runs in a 'zig zag', rising westwards and then turns to continue eastwards. A landing is provided at the change in direction.

The ramp is consistently approximately 2m wide. The ramped sections are approximately 8m in length. All ramped sections have a gradient 1:18. Between each ramped section is a level landing section approximately 2m in length.

The Scheme is not yet at a stage to produce a detailed design of the ramp.

The ramp design includes a landing at the change in direction and landings every 8m of ramp length, this is compliant with **BS 8300-1:8.1**.

The inclusion of handrails, colour contrasting and surfaces is not currently available. If the ramp detailed design is not compliant with accessible and inclusive design best practice, this could result in adverse equality impacts for **disabled staff and those who may have reduced mobility, such as older people**.

The ramped entrance point from the Vale Avenue is located within 10m of the stepped access along the same stretch of pavement. Therefore it is anticipated that the ramped access entrance will not feel inferior to the stepped access from Vale Avenue. Moreover the top of the ramped access shares a landing with the top of the stepped access, which creates a feeling of equal access to the marked pedestrian crossing across the DO vehicular access road.

#### Stepped access

The stepped access is located approximately 40m to the east of the vehicle access junction on Vale Avenue. The Scheme is not yet at a stage to produce information on the detailed design of the stepped access., however it is evident in design drawings that there will be landings between sets of stairs. The top of the stairs leads to a marked pedestrian crossing across the DO vehicular access road into the western section of the staff car park.

The Scheme is not yet at a stage to produce information on the detailed design of the stepped access. If the stepped access is not compliant with accessible and inclusive design best practice, this may result in adverse equality impacts for **disabled staff and those who may have reduced mobility, such as older people and pregnant women**. Whilst the ramped access is available as an alternative route, compliance with design standards is essential to ensure the safety of all staff using the stepped access, reducing the risk of injury.

Steps and stairs should be designed in accordance with **BS 8300- 1:9.1**.

Design features such as handrails should be designed in accordance with **BS 8300- 1:9.3**.

#### Crossings across vehicular access road

There are two marked pedestrian crossings running across the vehicular access road:

The Scheme is not yet at a stage to produce information on the detailed design of the crossings.. However, if the crossings are not compliant with accessible and inclusive design best practice, this could result in adverse equality impacts for **disabled**

Crossings should be designed to be visible. As detailed in **Traffic Signs Manual (2019) Chapter 6 Traffic Control**, informal crossings can be indicated with any or all of the following: coloured surfacing, raised carriageways, or



### Design element detailed design summary (including embedded mitigation)

One is located at the exit from the ramp and stepped access points, running approximately 11m south-north towards the western section of the staff car park. The gradient of the crossing is 1:50. Information on the gradient of the vehicular access road (perpendicular to the crossing) is currently unavailable.

The second crossing runs approximately 10m east-west connecting the eastern and western sections of the staff car park. Information on the gradient of the crossing is currently unavailable. The gradient of the vehicular access road (perpendicular to the marked pedestrian crossing) is approximately 1:20.

The Scheme is not yet at a stage to produce information on the detailed design of the crossings.

### Potential equality impacts and groups affected

people, including people with visual impairments, and those who may have reduced mobility, such as older people and pregnant women.

### Suggested further mitigation measures

patterned materials. Any pattern or coloured surfacing should not mimic the stripes of a Zebra crossing as this is likely to be misleading.

### Staff parking– refer to Section 2.3 for a more detailed overview of proposed staff and operational parking provision

#### Staff parking provision

Staff parking is located directly to the south of the DO building (western section) and south of the operational parking to the east of the DO building (eastern section). In total there are 85 car parking spaces. The Scheme is not yet at a stage to produce information on the detailed design of the staff parking provision.

In the western section there are:

- 60 car parking spaces, 10 of which are electric vehicle charging points.
- 16 motorcycle spaces
- 4 accessible parking spaces, one of which is an electric vehicle charging point.

In the eastern section there are:

The staff parking provision is non-compliant with design standards. This would present adverse equality impacts for **disabled staff and other members of staff who are blue badge holders**.

There are proposed to be a total of 85 parking spaces. Currently only four of these will be accessible, one of which with electric vehicle charging provision. This is 4.7% of the total provision. For workplaces where parking is provided, the minimum number of designated spaces should be one space for each employee who is a disabled motorist, plus 5% of the total expected visitor capacity for visiting disabled motorists.

Cycle storage is provided, however the Scheme is not yet at a stage to produce information on its design. A lack of accessible cycling storage may result in an adverse equality impact for **disabled staff** choosing to cycle to the DO, since adapted cycles are often larger than standard bicycles.

Staff parking provision should be designed to align with **BS 8300-1:7**.

The proposed accessible parking provision is 4.7% of the total staff parking provision. This is slightly below the 5% provision set out in **BS 8300-1**, and therefore an additional space would bring the development in line with and above compliance. However since the number of disabled employees is currently unknown, the proposed 4 spaces is deemed to be sufficient at this stage. It is advised that the RMG EDI team is engaged to confirm the requirement for designated accessible parking amongst existing staff anticipated to be working at the new DO.

Cycle storage designs, when available, should be reviewed in accordance with **BS 8300-1:11.1 and BS 8300-1:7.1**. This will also include CCTV installation and ensuring cycle stands are positioned to allow the parking of adapted cycles.

It is understood that the accessible car parking provision and cycle storage design will be reviewed during the next stages of design development.

## Design element detailed design summary (including embedded mitigation)

- 21 car parking spaces, 10 of which are electric vehicle charging points
- 4 motorcycle spaces – information on the design of these spaces is currently available
- Cycle storage – 40 spaces

### Accessible car parking space design

The Scheme is not yet at a stage to produce information on the detailed design of the accessible car parking provision.

The four accessible parking spaces are located directly south of the DO building to the west of the building entrance.

The three spaces nearest to the DO building entrance have marked access zones to either side for entering and exiting vehicles, however the space furthest to the west only has a marked zone to its right.

None of the spaces have a marked safety zone to the rear.

The Scheme is not yet at a stage to produce information on the design of the pedestrian route between the accessible parking spaces and the DO building.

## Potential equality impacts and groups affected

The Scheme is not yet at a stage to produce information on the detailed design of the accessible car parking provision.

However information received indicates that the design of the accessible car parking spaces are currently non-compliant. This would result in an adverse equality impact for **people with disabilities**.

None of the spaces have a safety zone for boot access and cars with rear hoists. This could prevent a disabled passenger or driver from safely accessing the boot, rear hoist or rear access ramp. To comply with **BS 8300-1:7.6** this zone should be a 1.2m wide and additional to the aisle width.

Whilst the space furthest west does not have a marked zone on the left, this is compliant with DfT (2021) Inclusive Mobility standards.

## Suggested further mitigation measures

Whilst the parking provided is compliant with DfT (2021) Inclusive Mobility, the design should seek to go beyond these standards and comply with BS 8300-1:7.6. Marked safety and access zones to the rear and either side of the parking space should be included for all designated accessible parking spaces. This will allow a disabled motorist or passenger to open the car door fully, to get in or out of the vehicle, to access the boot and rear hoist or ramp, and to manoeuvre around vehicles that are parked perpendicular to the carriageway.

The Scheme is not yet at a stage to produce information on the design of the pedestrian route between the accessible parking spaces and the DO building. To be compliant with **BS 8300-1:7.6**, this pedestrian route should have a dropped kerb or level access to allow for access to the DO building entrance without travelling behind parked cars. It is understood that the accessible car parking design will be reviewed during the next stages of design development.

### Pedestrian routes through staff car park

There are three marked pedestrian crossings proposed for the western car park. The Scheme is not yet at a stage to produce information on the detailed design of the crossings.

Two crossings run north-south, connecting the vehicular access road to the pedestrian route running east-west directly in front of the DO building entrance.

The Scheme is not yet at a stage to produce information on the detailed design of the crossings.

However, if the crossings are not compliant with accessible and inclusive design best practice, this may result in an adverse equality impact for **disabled staff and those who may have reduced mobility, such as older people**.

The positioning of the crossings and connecting pedestrian routes are clear. The two crossings running north-south follow

Crossings should be designed to be visible. As detailed in **Traffic Signs Manual (2019) Chapter 6 Traffic Control**, informal crossings can be indicated with any or all of the following: coloured surfacing, raised carriageways, or patterned materials. Any pattern or coloured surfacing should not mimic the stripes of a Zebra crossing as this is likely to be misleading.

Clearly marked pedestrian routes should be included in the staff car park design as set out by HSE <sup>37</sup> to ensure that pedestrians are separated from vehicle circulation routes.

<sup>37</sup> HSE (2023) 'Separating pedestrians and vehicles.' Available at: [Separating pedestrians and vehicles - Vehicles at work \(hse.gov.uk\)](https://www.hse.gov.uk/publications/sep-pev/)

### Design element detailed design summary (including embedded mitigation)

### Potential equality impacts and groups affected

### Suggested further mitigation measures

These two crossings are connected by a pedestrian route 2m wide running parallel to the central section of car parking bays.

A third crossing runs east-west, linking the pedestrian route parallel to the central parking section to a pedestrian route leading to a crossing running east-west across the vehicular access road.

The Scheme is not yet at a stage to produce information on the provision of any marked pedestrian routes through the car park in addition to the routes described above.

desire lines from the landing of the stepped and ramped access routes across the crossing on the vehicular access route, through the western staff car park towards the DO entrance.

The third crossing running east-west also follows desire lines towards the DO entrance.

The Scheme is not yet at a stage to produce information on the provision of any marked pedestrian routes through the car park in addition to the routes described above. A lack of clearly marked pedestrian routes through the car park may increase the likelihood of accidents as a result of pedestrians moving in the vehicle circulation areas. This could also increase stress and anxiety for **neurodiverse pedestrians and drivers** moving through the car park. This could also be dangerous for **disabled staff and people with reduced mobility such as older people**.

#### Access to entrances and exits from staff car park

The DO building entrance can be accessed from the staff car park via a pedestrian access route running east-west directly in front of the DO building entrance. The Scheme is not yet at a stage to produce information on this pedestrian route.

The designated accessible car parking spaces within the staff car park are the closest spaces to the building southern entrance, therefore supporting disabled staff in accessing the building.

The Scheme is not yet at a stage to produce information on this pedestrian route. Failure to comply with design standards would result in an adverse equality impact on **disabled staff and people who may have reduced mobility, such as older people**.

The pedestrian access route should be designed in compliance with **BS 8300-1:8.1**. This includes ensuring that the route is at least 1.8m although a width of 2m is preferable to accommodate larger electric mobility scooters. The connection between the access route and the crossings within the staff car park should have a dropped kerb to allow pedestrians with mobility impairments to use the route safely.

### Operational parking– refer to Section 2.3 for a more detailed overview of proposed staff and operational parking provision

#### Operational parking provision

A total of 132 operational parking spaces for use by the red fleet, the majority of which are electric vehicles, are proposed to the east and north of the DO building. These are located in a secured area and are accessed via the vehicular access road.

The Scheme is not yet at a stage to produce information on the provision of any additional marked pedestrian routes through the operational car park. A lack of clearly marked pedestrian routes through the car park may increase the likelihood of accidents as a result of pedestrians moving in the vehicle circulation areas, particularly since there will be HGVs and the red fleet moving within the car park. This could also increase stress and anxiety

Crossings should be designed to be visible. As detailed in **Traffic Signs Manual (2019) Chapter 6 Traffic Control**, informal crossings can be indicated with any or all of the following: coloured surfacing, raised carriageways, or patterned materials. Any pattern or coloured surfacing should not mimic the stripes of a Zebra crossing as this is likely to be misleading.

### Design element detailed design summary (including embedded mitigation)

### Potential equality impacts and groups affected

### Suggested further mitigation measures

There are two crossings running east-west across the vehicular access road connecting red fleet parking spaces to the DO building entrances.

The Scheme is not yet at a stage to produce detailed design information on these pedestrian routes. Pedestrian routes run east-west between car parking bays as well as along the eastern and northern perimeter of the car park.

The Scheme is not yet at a stage to produce information on the provision of any additional marked pedestrian routes through the operational car park.

for pedestrians and drivers with **neurodiversity** moving through the car park and could be dangerous for **staff with reduced mobility**.

Some pedestrian routes are particularly long and currently lack resting places. Pedestrian routes without resting places may have differential impacts on **disabled people and other people who may have reduced mobility**. TfL has developed guidance that states for people with a physical disability who are able to walk, around 30% can walk no more than 50 metres without stopping or experiencing severe discomfort. A further 20% of people with a physical disability can manage between 50 and 200 metres.<sup>38</sup>

Clearly marked pedestrian routes should be included in the staff car park design to ensure that pedestrians are separated from vehicle circulation routes as set out by HSE<sup>39</sup>

It is recommended that seating is provided as rest points at regular intervals throughout the car park, pedestrian access routes and along the ramped access to ensure that people with limited mobility are not disadvantaged by the increased walking distance.

#### Access to building entrances and exits from operational car park

The marked pedestrian crossings connecting the car parking spaces to the DO entrances join pedestrian access routes running north-south along the eastern side of the DO building. These lead to the building entrances on the northern side of the DO adjacent to the HGV loading areas. The Scheme is not yet at a stage to produce detailed design information for these routes.

The access routes are approximately 2m wide. The sloping sections of these pedestrian routes are designed with a maximum 1:18 gradient, with landings in between. Maximum spacing between landings is approximately 19m.

The Scheme is not yet at a stage to produce detailed design information for these routes. The route widths are compliant with **BS 8300-1:8.1**. The sloping sections of these routes are designed with a compliant gradient for a 'gently sloping' route as outlined in **BS 8300-1:8.1**.

Level landings are included at a maximum of every 19m. For a ramp with a 1:18 gradient, a level landing should be included every 8m. These access routes are therefore not compliant with guidance set out in **BS 8300-1:8.1**.

This may result in adverse impacts on **disabled staff and those who have reduced mobility, such as older people**.

The pedestrian access route should be designed in compliance with **BS 8300-1:8.1**.

#### Secure access to operational car park

As outlined in **BS 8300-1:7.11**, ticket, swipe card or key-activated entrance barrier controls to private car parks are often difficult to reach and to manipulate by drivers with limited dexterity. Poor implementation of these measures could result in

Barrier control systems should be designed in line with **BS 8300-1:7.11**. Best practice sets out that dual control systems, i.e. having barrier control panels at two different heights, can assist such people; remote control systems are

<sup>38</sup> Transport for London (TfL) (2020). 'The Planning for Walking Toolkit: Tools to support the development of public realm design briefs in London'

<sup>39</sup> HSE (2023) 'Separating pedestrians and vehicles.' Available at: [Separating pedestrians and vehicles - Vehicles at work \(hse.gov.uk\)](https://www.hse.gov.uk/pev/)

### Design element detailed design summary (including embedded mitigation)

### Potential equality impacts and groups affected

### Suggested further mitigation measures

The Scheme is not yet at a stage to produce detailed design information for the plans for secure access to the operational car park from the vehicular access road.

Available information indicates that a barrier control system will be in place to limit access to the operational car park.

an adverse equality **impact for disabled staff members or those who may have reduced mobility such as older people and pregnant women.**

another option for regular users. Ticket, swipe-card or key-activated systems for car park barriers should be operable by the driver without leaving the vehicle.

### Layout and wayfinding approach

The Scheme is not yet at a stage to produce detailed design information on the proposals for wayfinding design, including signage.

Whilst the Scheme is not yet at a stage to produce detailed design information on the proposals for wayfinding design, including signage, a high-level assessment of the inherent legibility of the Scheme layout can be undertaken.

Wayfinding and layout should be designed to align with **BS 8300- 1:5.2** and **PAS 6463:6.**

The pedestrian routes from Vale Avenue to the DO are clear and follow desire lines towards the DO entrance.

The external built environment should be designed, constructed and managed to facilitate convenient orientation and way-finding. Orientation and way-finding should be planned at the outset of a project to ensure that the arrangement of any building and its entrances on a site enable people to navigate and orientate themselves easily. The ease of orientation in and way-finding through an area is determined by its inherent legibility supported by information systems and signage.

The Scheme is not yet at a stage to produce detailed design information on the proposed circulation routes for vehicles within the staff and operational car parks. A lack of clear circulation/directional markings within the car parks may cause stress and anxiety for **neurodiverse drivers and pedestrians** moving through the car parks.

Aligning with **BS 8300- 1:8.3** and the **Sign Design Guide**<sup>40</sup>, signage should clearly guide pedestrians to accessible and stepped routes towards the DO building and staff and operational car parks, giving as much information as possible, including distances and gradients where appropriate. These should align with an overall signage strategy for the for the site.

The Scheme is not yet at a stage to produce design information on the design of any additional marked pedestrian routes through the car parks. A lack of clearly marked pedestrian routes may increase the likelihood of accidents as a result of pedestrians moving in the vehicle circulation areas, particularly since there will be HGVs, red fleet and staff vehicles moving within the car parks. This could also increase stress and anxiety for some pedestrians, such as **neurodiverse people** who may struggle with wayfinding. This could also be dangerous for **staff with reduced mobility such as older people and pregnant women.**

Clearly marked pedestrian routes should be included in the staff car park design to ensure that pedestrians are separated from vehicle circulation routes as set out by HSE <sup>41</sup>

<sup>40</sup> Sign Design Society and the Royal National Institute of Blind People (200): Sign Design Guide – a guide to inclusive signage

<sup>41</sup> HSE (2023) 'Separating pedestrians and vehicles.' Available at: [Separating pedestrians and vehicles - Vehicles at work \(hse.gov.uk\)](https://www.hse.gov.uk/vehicles-at-work/)

## 4.2 Impact on feelings of safety and security during operation

The following table describes the potential impacts of the Scheme on protected characteristic groups, with a focus on safety and security of staff during operation. These impacts have been identified through a review of the design, potential risks and opportunities and inclusive design standards.

**Table 4.2: Impact on feelings of safety and security during operation**

Detailed design summary (including embedded mitigation)	Potential equality impacts and groups affected	Suggested further mitigation measures
<p><b>Lighting</b></p> <p>Information provided on the proposed lighting layout indicates that the car parks and associated external areas including the vehicle access route will be well lit.</p> <p>However, it is currently unclear whether lighting will be included along key pedestrian routes to the DO, including along the footway on Vale Avenue to the west of the vehicular access road, and the ramped and stepped access to the east of the vehicular access road.</p>	<p>As outlined in <b>BS 8300-1:11</b> good external environment lighting is crucial in ensuring safety and enabling <b>staff with visual impairments, and staff who have sensory/neurological processing difficulties</b>, to be able to use the external environment confidently, safely and securely. It can also be used as a means to guide people and help them to understand key routes.</p> <p>Poor lighting of the pedestrian footways and stepped access could result in an adverse equality impact <b>disabled staff members, as well as neurodiverse staff</b> who may face challenges associated with wayfinding. It may also impact groups of people who are more likely to be victims of crime such as <b>ethnic and religious minority groups, LGBT+ people and women</b>.</p>	<p>It is advised that the lighting layout is revised to include lighting of the footways and stepped access to the DO. Lighting and visibility should be designed in accordance with <b>BS 8300-1:11</b>. The lighting strategy is yet to be fully developed, however this is anticipated to include the lighting of pedestrian walkways and stepped access.</p> <p>The lighting of the external environment needs to take account of the wide range of illuminance that can occur during the day and the night. This is critical since the DO will be in operation 24 hours each day. It is also recognised that lighting plans should be environmentally conscious to minimise disruption to local wildlife.</p> <p>Since the car parks and access routes will require lighting to guide users to access and egress buildings, the difference in illuminance experienced by the user has to be considered. This is because users take time to adapt to differences in illuminances, with a longer time being taken to adapt to a darker environment. Therefore, to allow for night-time adaptation with a user moving from inside to outside a building, a gradual reduction of illuminance from the internal to the wider external environment is needed. To allow for daytime adaptation, the opposite is the case.</p>
<p><b>Concealed areas</b></p> <p>There are several areas of the Scheme which may be concealed or lack good visibility from the DO building as well as the main pedestrian and vehicular circulation areas:</p> <ul style="list-style-type: none"> <li>● A section of the pedestrian route to the west of the vehicular entrance point running along Vale Avenue is anticipated to be hidden from view due to existing tree locations.</li> </ul>	<p>The lack of good visibility of sections of the pedestrian route and the ramped access may reduce natural surveillance, which could in turn increase fears around safety and security.</p> <p>The lack of visibility of the cycle storage from the DO building and carpark could also increase fears around safety and security, including the potential risk of bicycle theft.</p> <p>These effects could result in an adverse equality impact for staff members who belong to protected characteristic groups which are more vulnerable to changes in safety and security. This includes <b>young</b></p>	<p>It is advised that trees and bushes surrounding the pedestrian and ramped access routes are spaced to enable natural surveillance from the vehicular access route, the car parks, and Vale Avenue.</p> <p>It is advised that the tree positioned directly south of the cycle storage is relocated so that the cycle storage area is visible from the eastern section of the staff car park to enable greater natural surveillance.</p> <p>The Scheme is not yet at a stage to produce detailed information on the proposals for CCTV provision, however it is advised that CCTV is</p>

Detailed design summary (including embedded mitigation)	Potential equality impacts and groups affected	Suggested further mitigation measures
<ul style="list-style-type: none"> <li>The section of ramped access running from the Vale Avenue entrance point to west to east due to the proposed placement of trees.</li> <li>The cycle storage area may be partially concealed by a tree proposed within the eastern section of the staff car park.</li> </ul>	<p><b>people, older people, disabled people, people from minority faith groups and ethnic minority groups, LGBT+ groups, and women.</b></p>	<p>installed within the car parks, at the cycle storage as well as along the pedestrian route .</p>
<p><b>Distances to car parking spaces and ramp/steps</b></p> <p>Along the proposed pedestrian access routes, the furthest distance between a staff car parking space in the eastern staff car park and the DO front entrance is approximately 95m.</p> <p>Along the proposed pedestrian access routes through the operational car park, the furthest distance between an operational staff parking space and the entrance to the DO building adjacent to the HGV loading area is 180m.</p>	<p>Long distances between the DO building entrance and car parking spaces may result in an adverse equality effect for staff members belonging to groups which are more vulnerable to changes in safety and security, including <b>young people, older people, disabled people, people from minority faith groups and ethnic minority groups, LGBT+ groups, and women.</b></p>	<p>The Scheme is not yet at a stage to produce detailed information on the proposals for CCTV provision, however it is advised that CCTV is installed within the car parks as well as along the pedestrian routes to improve feelings of safety and security.</p> <p>When information on plans for artificial lighting become available, the lighting and visibility of car parks and pedestrian access routes should be reviewed in accordance with <b>BS 8300-1:11</b>. The lighting strategy is yet to be fully developed, however this is anticipated to include the lighting of pedestrian walkways and stepped access.</p>
<p><b>Road safety</b></p> <p>As outlined in Section 2.1.3.3, the Transport Assessment concluded that vehicle trips generated by the proposed development are forecast to have a negligible impact on the operation of the local transport network. Therefore, no further mitigation is required to improve the operation of the junctions assessed.</p>	<p>It is not anticipated that an equality impact will be generated as a result of changes in vehicle trips.</p>	<p>It is recommended that a road safety strategy and training is developed by RMG to ensure that all staff are briefed on safe practices when accessing the DO as pedestrians using the surrounding road network.</p> <p>As outlined in Table 5.1, it is also recommended that the pedestrian footways on both sides of Vale Avenue should be revised in accordance with <b>BS 8300- 1:8.1 and BS 8300- 1:8.2</b> to ensure that they are sufficiently wide to accommodate a larger electric mobility scooter.</p>



## 5 Conclusion and key recommendations

### 5.1 Conclusion

The EqlA has identified a number of potential impacts that could arise for staff with protected characteristics as a result of the Scheme. The details of these impacts are set out in detail in Chapter 5.

The assessment identifies that without implementation of the recommendations outlined in tables 4.1 and 4.2, access and parking proposed as part of the operation of the new Patcham Court Farm Delivery Office has the potential to cause adverse equality effects for staff during operation.

This assessment has identified that there are several Scheme design elements which are non-compliant with accessibility and inclusive design standards. Without mitigation, these are anticipated to result in adverse equality impacts for disabled staff and staff with reduced mobility such as older people and pregnant women.

This assessment has also identified that there are several Scheme design elements which may have an adverse effect on feelings of safety and security. The adverse equality impacts as a result of changes to feelings of safety and security are anticipated to affect staff who are older people, disabled people, people from minority faith groups and ethnic minority groups, LGBT+ groups and women.

The Scheme is at an early stage of design development; therefore it is anticipated that these non-compliances and potential adverse effects will be addressed at later stages of the design process. Moreover, it is recognised that some of these non-compliances are outside the scope of RMG and therefore may not be possible to achieve through the Scheme. Nevertheless, RMG will work alongside Brighton and Hove Council and local bus networks to improve outcomes for staff.

### 5.2 Key recommendations

The following key recommendations will ensure that the proposed access and parking provision is an example of inclusive design best practice. Refer to Chapter 4 for a full assessment of the recommended mitigations.

1. RMG staff have been engaged via RMG management, however no direct engagement has been undertaken between staff and the design team. It is recommended that RMG staff continue to be engaged via the appropriate preferred channels throughout the design process to ensure that all users are able to input and provide recommendations based on lived experience.
2. This report should be reviewed and updated as the design develops to ensure potential adverse effects are reported and where possible mitigated against.
3. The pedestrian footways on pedestrian routes to the Site should be revised in accordance with BS 8300-1 – Design of an accessible and inclusive built environment Part 1: External environment – Code of practice (2018) to ensure that they are sufficiently wide to accommodate larger electric mobility scooters. However, since several of these pedestrian routes on Vale Avenue are outside the boundary of RMG land ownership, it is recognised that these recommendations may be outside of the scope of RMG and therefore may not be possible to achieve through the Scheme. RMG should work alongside Brighton and Hove Council to improve outcomes for staff.



4. Existing bus stops anticipated to be used by staff could be enhanced to be compliant with Department for Transport inclusive mobility best practice, including bold and clear bus stop flags, shelters, seating and timetable information. However, it is recognised that these recommendations may be outside of the scope of RMG and therefore may not be possible to achieve through the Scheme. Nevertheless, RMG should work alongside Brighton and Hove Council and local bus networks to improve outcomes for staff.
5. The car parks, pedestrian access routes through the car parks and associated wayfinding and lighting should be designed in accordance with BS 8300-1. The lighting strategy is yet to be fully developed, however this is anticipated to include the lighting of pedestrian walkways and stepped access. It is also recognised that lighting plans should be environmentally conscious to minimise disruption to local wildlife.
6. The proposed accessible parking provision is 4.7% of the total staff parking provision. This is slightly below the 5% provision set out in BS 8300-1, and therefore an additional space would bring the development in line with and above compliance. However since the number of disabled employees is currently unknown, the proposed 4 spaces is deemed to be sufficient at this stage. It is advised that the RMG EDI team is engaged to confirm the requirement for designated accessible parking amongst existing staff anticipated to be working at the new DO.
7. Pedestrian crossings should be clearly marked so that they are visible to drivers and in turn ensure that pedestrians can cross safely.
8. A clearly marked pedestrian route should be included in the south of the western section of the staff car park (running west to east) to deter pedestrians from walking in the road space intended for vehicles. The eastern end of this pedestrian route should tie in with the formal footway to ensure pedestrians use the crossing safely and appropriately.
9. Aligning with BS 8300- 1 and the Sign Design Guide, signage should clearly guide pedestrians to accessible and stepped routes towards the DO building and staff and operational car parks, giving as much information as possible
10. It is advised that trees and bushes surrounding the pedestrian access routes are spaced to enable natural surveillance from the vehicular access route, the car parks, and Vale Avenue.
11. It is understood that RMG will operate CCTV across the site. It is recommended that this is installed within the car parks, at the cycle storage as well as along the pedestrian route.
12. A set-down / pick-up point is not currently proposed within the staff car park design. Creating a designated set-down-pick up point within the design of the western section of the staff car park at the front of the DO building would improve building access for disabled staff and staff with reduced mobility such as older people and pregnant women who may be getting dropped off or picked up from the DO. Creating a designated space for set-down / pick-up would also reduce the likelihood of accidents caused by congestion within the car park. This should be designed in accordance with BS 8300-1.

## A. Literature review

### A.1 Accessibility, inclusion and mobility

The Scheme will affect the mobility and inclusion of RMG staff working at the DO. Impacts on accessibility and inclusion can affect all parts of the community but would be anticipated to have a disproportionately negative effect on staff who are **older people, pregnant women and disabled people**.

#### A.1.1 Car park design

Proposed parking provision for the DO is divided into staff parking, operational parking (for RMG vehicles including HGV and red fleet) and cycle parking. There is limited research relating to how car park design can affect the accessibility, inclusion and mobility protected characteristic groups. However it is well recognised that the design and location of parking should be designed to ensure that parking options and choices are provided for **disabled people and people with reduced mobility**, such as **older people** and **pregnant women**.

The BSI Standards BS8300-1:2018 <sup>44</sup> sets out best practice for the design of vehicle parking to ensure that they are designed to be accessible and inclusive. Key best practice guidance is summarised below.

#### Setting-down /picking-up points

- A designated setting-down point or picking-up point, suitable for **disabled** passengers, should be provided on firm and level ground, close to the accessible entrance to a building in addition to designated accessible parking spaces and taxi waiting zones.
- If feasible, a short-term waiting area for drivers of vehicles picking up disabled passengers or a disabled driver waiting for passengers should also be provided.
- Setting-down points should have dimensions of not less than 9 m × 3.6 m.
- The surface of the access route, alongside a setting-down point, should be level to allow convenient transfer into and from a wheelchair.
- If feasible, a setting-down point should be covered to provide protection from the weather. If the setting-down point is covered, the ceiling height above the vehicle surface should be at least 2.6 m.

#### Accessible parking

- For workplaces where parking is provided, the minimum number of designated spaces should be one space for each employee who is a disabled motorist, plus 5% of the total visitor capacity for visiting disabled motorists subject to a minimum of two spaces.
- Space should be available to enable a disabled motorist or passenger to open the car door fully, to get in or out of the vehicle, and to manoeuvre around vehicles.
- A zone of 1.2m wide should be provided between designated accessible parking spaces to enable a disabled driver or passenger to get in or out of a vehicle and access safely the boot, rear hoist or rear access ramp.
- In some instances, a person might need to manoeuvre a powered wheelchair or electric mobility scooter through the rear or side entrance of a vehicle, requiring a larger than standard designated accessible parking space.

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<sup>44</sup> British Standards (2018) 'BS8300-1:2018 Design of an accessible and inclusive design environment'

- Designated accessible parking spaces should have a firm, level surface, with level access to a marked-out pedestrian-accessible route to the destination(s) they serve.

### Electric parking

- Where charging points for electric vehicles are provided, equivalent provision should also be made for designated accessible spaces.

### Cycle parking

- Cycle parking should be located in a clearly defined area.
- Cycle stands should contrast visually with the background against which they will be seen.
- Where a number of cycle stands are provided, some of the cycle stands should be positioned to allow the parking of adapted cycles, which can be considerably larger than other cycles.

## A.1.2 Pedestrian environment design

Whilst no publicly accessible areas are proposed given the nature of the development, everybody accessing the DO will be required to cross the car park as pedestrians to reach the building entrance, whether that is from a vehicle parked within the car park or from Vale Avenue as a pedestrian. Several issues require consideration when designing the pedestrian environment.

**Older people** and **disabled people** with mobility and visual impairments are likely to be reliant on an accessible, well-maintained and consistent pedestrian environment to ensure they can make journeys safely and confidently. Research shows that **aging** and **vision impairment** increase the risk of falls and approximately one third of older people fall at least once a year.<sup>45</sup> Disabled people with balance issues are additionally likely to be more susceptible to falls and therefore more reliant on a well-maintained pedestrian environment.

- **Pedestrian surface conditions:** A key barrier to the pedestrian environment is poorly maintained, cracked, uneven and loose surface conditions. Such conditions make walking difficult and can be potentially dangerous for older and disabled people.<sup>46</sup> Surfaces should be covered with non-slip materials. Stair treads should be non-slip and in contrasting colours.<sup>47</sup> Uneven surfaces and gaps between paving slabs etc. can cause problems for some people, including those using canes and crutches, people who have visual impairments, people with balance issues and wheelchair users.<sup>48</sup>
- **Pedestrian environment layout:** A poor layout can generate confusion and stress, as well as physical accidents, such as falls, for older or less mobile users,<sup>49</sup> and for people with neurodiversity or autism.<sup>50</sup> Signage should not be placed within pedestrian routes where it

<sup>45</sup> Hopewell S, Adedire O, Copsey BJ, Boniface GJ, Sherrington C, Clemson L, et al., 'Designing Vision-Friendly Living Environments (2019), Available at [Designing Vision-Friendly Living Environments - Lighthouse Guild](#)

<sup>46</sup> Department for Transport (December 2021). 'Inclusive Mobility: A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure.'

<sup>47</sup> Hopewell S, Adedire O, Copsey BJ, Boniface GJ, Sherrington C, Clemson L, et al., 'Designing Vision-Friendly Living Environments (2019), Available at [Designing Vision-Friendly Living Environments - Lighthouse Guild](#)

<sup>48</sup> Department for Transport (DfT) (December 2021). 'Inclusive Mobility: A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure.'

<sup>49</sup> Rail Delivery Group (2015). 'On track for 2020? The future of accessible rail travel'

<sup>50</sup> British Standards Institution (2022). 'Design for the mind – Neurodiversity and the built environment – Guide'

could form an obstacle, or where it might be obscured and missed, for example on low-level walls, within a shrubbery or hidden by vehicles.<sup>51</sup>

- **Use of appropriate tactile surfaces:** Tactile pavements are used to provide visually impaired people with guidance by helping to identify potential hazards, such as a change in level or a platform edge.<sup>52</sup> Incorrect use of tactile paving surfaces can result in incorrect information about a surface being conveyed to individuals, which is particularly dangerous for those with visual impairments.<sup>53</sup> Correct and consistent use of tactile paving is therefore vital to ensuring a safe and accessible travel environment. While only a small proportion of visually impaired people have no sight at all, many have sufficient residual vision to detect contrasts in tone and colour. Contrasts in colour and tone should be used to accentuate certain key features, including the presence of tactile paving.<sup>54</sup>
- **Applying the appropriate gradient:** Pedestrian routes that have gradients can present a challenge to those with limited mobility. Guidance suggests that a level resting platform approximately 1.8m long should be provided at least every 10m for ramps with a gradient of 1:20, and more often for ramps with steeper gradients.<sup>55</sup> As outlined by the Department for Transport (DfT), it is important for the gradient of a path to be aligned with that of gradients of ramps for accessibility, and that ramps are designed appropriately: the maximum gradient in the direct line of travel should not exceed 1:12, and where space allows, a gradient of 1:20 should be achieved.<sup>56</sup>
- **Width of pedestrian walkways:** A minimum width of 1.8m is required for pavements and walkways, although the width should be 2m wide if possible, to ensure disabled access around buildings. It is also important that the width of the pavement provides sufficient space so that people can walk alongside one another, and so that areas are sufficient for people to circulate without encroaching upon personal space boundaries, which is of particular importance for people with neurodivergent differences and/or information processing differences.<sup>57</sup>
- **Step-free access:** For people with limited mobility, step-free access is important. Full step-free access through appropriate gradients can improve accessibility for these groups. Many users that navigate steps, may still experience pain or discomfort when using them, particularly if the rise of each step is too high. After parking a vehicle, people need to be made aware of the accessible route away from their parking space, this route should be demarcated from any vehicular or cycle route.<sup>58</sup>
- **Walking distances and rest points:** According to the NHS, conditions such as arthritis or weak muscles are more likely to be experienced by **older people**. This means that they may walk more slowly, tire more easily, and find climbing stairs more challenging.<sup>59</sup> Seating provided as rest points at regular intervals can help to ensure that **people with limited mobility** are not disadvantaged by the increased walking distance.<sup>60</sup>

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<sup>51</sup> British Standards (2018) 'BS8300-1:2018 Design of an accessible and inclusive design environment'

<sup>52</sup> DfT (December 2021). 'Guidance on the Use of Tactile Paving Surfaces'

<sup>53</sup> DfT (December 2021). 'Guidance on the Use of Tactile Paving Surfaces'

<sup>54</sup> DfT (2021): 'Inclusive Mobility: A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure'

<sup>55</sup> Sensory Trust (2017): 'Outdoor access guidance –ramps'

<sup>56</sup> DfT (2021): 'Guidance on the use of Tactile surfaces'

<sup>57</sup> British Standards Institution (2022). 'Design for the mind – Neurodiversity and the built environment – Guide'

<sup>58</sup> British Standards (2018) 'BS8300-1:2018 Design of an accessible and inclusive design environment'

<sup>59</sup> NHS (2014): 'Safe, compassionate care for frail older people using an integrated care pathway'

<sup>60</sup> Transport for London (TfL) (2020). 'The Planning for Walking Toolkit: Tools to support the development of public realm design briefs in London'

Pedestrian routes may have differential impacts on **disabled people**, as alternative routes could increase travel distances and be disorienting to people with different disabilities. DfT has developed guidance that states for people with a physical disability who are able to walk, around 30% can walk no more than 50 metres without stopping or experiencing severe discomfort. A further 20% of people with a physical disability can manage between 50 and 200 metres.<sup>61</sup> The guidance also highlights that disabled people tend to find standing to rest challenging (and potentially painful), while older people are more likely to find walking long distances challenging compared to other sections of the general population.<sup>62</sup> Pedestrian environment and surfaces should be designed and maintained in a way that supports the independent travel and sustainable mobility of people who are disabled to ensure they have equal access.

### A.1.3 Layout and wayfinding

The clarity of routes and positioning of key facilities is likely to impact people with sensory and/or information processing differences more than others, and this should be taken into account when designing layouts that affect walking routes and distances.<sup>63</sup>

Information provision and signage plays an important role for **disabled** passengers, especially when visiting a location for the first time. Simple signs provide clear guidance about the route to take to reach the next stage of the journey and help to reassure the passenger.<sup>64</sup> The environment should also be free of unnecessary obstructions and be made simple to navigate in order to be made **autism-friendly**.<sup>65</sup> Inconsistencies with the provision of information in visual formats can make travel particularly difficult for people with **hearing loss** and those that use **sign language**. For these people, barriers can occur when they are reliant on staff to provide information about their journey.<sup>66</sup> Visual displays are therefore the most straightforward method for this group to access journey information, so ensuring that appropriate visual signage remains in place throughout construction is vital.<sup>67</sup>

DfT guidance suggests the size of letters should be related to the distance from which the sign will usually be read, as well as stressing the importance of colour contrast – ensuring characters on signs contrast with the sign background, the size of symbols and the appropriate positioning of signs.<sup>68</sup> Information and signage should be located where it is clearly identifiable and visible from all directions. The shape, materials, colour and typeface of signs should be consistent throughout an area.<sup>69</sup>

Signage is particularly important for highlighting the locations of designated accessible parking spaces. Signs should be provided at the entrance to the car park and at each change in direction to direct motorists to the relevant designated accessible parking spaces.<sup>70</sup>

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<sup>61</sup> DfT (2021): Inclusive Mobility: A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure

<sup>62</sup> DfT (2021): Inclusive Mobility: A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure

<sup>63</sup> British Standards Institution (2022). 'Design for the mind – Neurodiversity and the built environment – Guide'

<sup>64</sup> Mackett, R (2017): 'Building Confidence – Improving travel for people with mental impairments

<sup>65</sup> Stephen Simpson (2015). 'Checklist for Autism-Friendly Environments'

<sup>66</sup> Action for Hearing Loss (2014): 'Access to rail travel for people with hearing loss: policy statement'

<sup>67</sup> Action for Hearing Loss (2014): 'Access to rail travel for people with hearing loss: policy statement'

<sup>68</sup> DfT (2018): 'Traffic Signs Manual: The Design of Traffic Signs'

<sup>69</sup> British Standards (2018) 'BS8300-1:2018 Design of an accessible and inclusive design environment'

<sup>70</sup> British Standards (2018) 'BS8300-1:2018 Design of an accessible and inclusive design environment'

Directional signs should specifically identify routes that are accessible and step-free, and should give as much information as possible to assist people in planning and navigating their route, including distances and gradients where appropriate.<sup>71</sup>

## A.2 Feelings of safety and security

The Scheme has the potential to change feelings of personal safety and security for staff in the operation phase of the DO. **Young people, older people, disabled people, people from minority faith groups and ethnic minority groups, LGBT+ groups and women** are vulnerable to such changes.

The fear of crime is the anxiety people feel about potentially being a victim of crime. It does not necessarily relate to the probability of being a victim of crime, but instead can be influenced by external factors and narratives. Older people may feel more vulnerable at night, this was highlighted by a DfT study which found that older people feel most at risk during 'walking and waiting' elements of their journeys. A proposed solution to this was to increase the use of good quality street lighting to contribute towards a safer travel environment after dark.<sup>72</sup>

Perceived safety extends beyond a fear of crime, covering a spectrum of experiences from being 'inconvenienced', feeling 'ill-at-ease' to feeling 'endangered'<sup>73</sup> There is evidence to suggest that **people from an ethnic minority background** have greater concerns than White people about their personal safety and racial attacks when travelling, particularly at night.<sup>74</sup> To overcome some of these concerns, it has been found that good quality lighting and the provision of CCTV improves feelings of safety for users.<sup>75</sup>

**Women** are more likely to have security concerns as pedestrians than men, with almost two-thirds of women in the UK feeling unsafe walking alone.<sup>76</sup> Moreover 71% of women in the UK have experienced sexual harassment in a public space and only 3% of 18-24 year-olds have not experienced harassment.<sup>77</sup> Walkability of an area is also a fundamental factor in influencing the safety perceptions of women, influenced by lighting, clear signage and safety procedures.<sup>78</sup> Therefore, potential changes in pedestrian environment are particularly likely to affect women.

Research shows that the threat of harassment and violence affects **women** by restricting their lifestyles and freedom to use public space,<sup>79</sup> with studies showing that finding 'the right amount of panic' and taking proportionate precautions to stay safe is a constant struggle for women and girls.<sup>80</sup> Moreover designing spaces for the 'default male' without a clear strategic focus on gender may impact their use by women and girls, who are more likely to avoid using spaces if deemed unsafe. In contrast, spaces designed with a gendered perspective may be perceived by women and girls as safer, more inclusive and welcoming.<sup>81</sup>

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<sup>71</sup> British Standards (2018) 'BS8300-1:2018 Design of an accessible and inclusive design environment'

<sup>72</sup> DfT (2012): 'Transport solutions for older people: Information resource for Local Authorities'

<sup>73</sup> World Bank (2020) 'Handbook for Gender-Inclusive Urban Planning and Design'. Available from: <https://www.worldbank.org/en/topic/urbandevelopment/publication/handbook-for-gender-inclusive-urban-planning-and-design>

<sup>74</sup> DfT (2012): 'Transport for Everyone: An action plan to promote equality'

<sup>75</sup> Department for Transport (2012): 'Transport for Everyone: an action plan to promote equality'

<sup>76</sup> Plan International (2016): 'Almost two thirds of women feel unsafe walking alone after dark'

<sup>77</sup> UN Women (2021): 'Prevalence and reporting of sexual harassment in UK public spaces.' Available from: [https://www.unwomenuk.org/site/wp-content/uploads/2021/03/APPG-UN-Women-Sexual-Harassment-Report\\_Up-dated.pdf](https://www.unwomenuk.org/site/wp-content/uploads/2021/03/APPG-UN-Women-Sexual-Harassment-Report_Up-dated.pdf)

<sup>78</sup> Department for Transport (2020) 'TAG Unit A4.1: Social Impact Appraisal'

<sup>79</sup> Allen, K., Barbin, A., Khan, A. and Ferreira, J. 2022. VAWG in public spaces: Barriers to reporting and impacts on women and girls. Available from: <https://www.britisccrim.org/wp-content/uploads/2022/08/BSCN-Summer-2022-VAWG-in-public-spaces.pdf>

<sup>80</sup> Vera-Gray, F (2018): 'The Right Amount of Panic' Policy Press

<sup>81</sup> World Bank (2020) 'Handbook for Gender-Inclusive Urban Planning and Design'. Available from: <https://www.worldbank.org/en/topic/urbandevelopment/publication/handbook-for-gender-inclusive-urban-planning-and-design>



As with other public spaces, car parks can present particular challenges for **women**, particularly around safety and security walking to and from their car. Consequently, some car parks have trialled women's only car parking spaces closer to the entrances to buildings to reduce walking distances to cars.

Feelings of safety are important to consider when looking at pedestrian travel patterns of **LGBT+ people**. Hate crimes that related to a person's sexual orientation increased by 25% in England and Wales in the 2018/2019 period.<sup>82</sup> Evidence also shows that three in ten LGBT+ people might choose to adapt behaviour when deciding whether to walk down a certain street.<sup>83</sup> People's sexual orientation is therefore a likely to factor in their decisions about the use of specific pedestrian corridors.

Home Office data shows that hate crimes relating to a person's sexual orientation has increased year on year.<sup>84</sup> Although this does not specifically focus on experiences when using car parks and accessing building, it shows that crime relating to this characteristic are increasing. Research into fear of hate crime found that 26% of **LGBT+** people avoid certain streets because they don't feel safe there. This figure doubles for those who have been the victim of a hate crime in the last 12 months.<sup>85</sup>

Parking facilities present particular challenges relating to safety and security, with research indicating that slower speeds can give users, both drivers and pedestrians, a false sense of security and driver inattention is a key contributing factor resulting in vehicle crashes. For example, a study by the National Safety Council found that 66% of drivers would make a phone call whilst driving in a car park and 56% would send a text.<sup>86</sup>

The Safer Parking Scheme is a national standard for UK car parks that have low crime and measures in place to ensure the safety of people and vehicles. A Park Mark is awarded to car parks that achieve the required standards. For example, Park Mark car parks use directional signage and traffic flow measures such as one way circulation to reduce confusion and the risk of accidents. Moreover pedestrian routes and exit points are clearly indicated with signage and painted paths. Park Mark car parks also maximise use of daylight and supplement this with artificial lighting to reduce fear of crime and opportunities to commit crime. Furthermore, Park Mark car parks are well kept with measures in place to remove litter and graffiti, which can support in creating a safe environment.<sup>87</sup>

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<sup>82</sup> Home Office (2019): 'Hate crime, England and Wales, 2018/2019'

<sup>83</sup> Bachmann, C and Gooch, B. (2017): 'LGBT in Britain: Hate Crime and Discrimination'

<sup>84</sup> Home Office (2018): 'Hate crime, England and Wales, 2017/18'

<sup>85</sup> Stonewall (2017): 'LGBT in Britain: Hate crime'

<sup>86</sup> National Safety Council. Parking Lot Injuries Often Result of Distraction. <https://www.nsc.org/road-safety/safety-topics/distracted-driving/parking-lot-safety>

<sup>87</sup> British Parking Association – Park Mark (no date) Key issues for drivers. Available at: [Park Mark - Key Issues for Drivers](#)