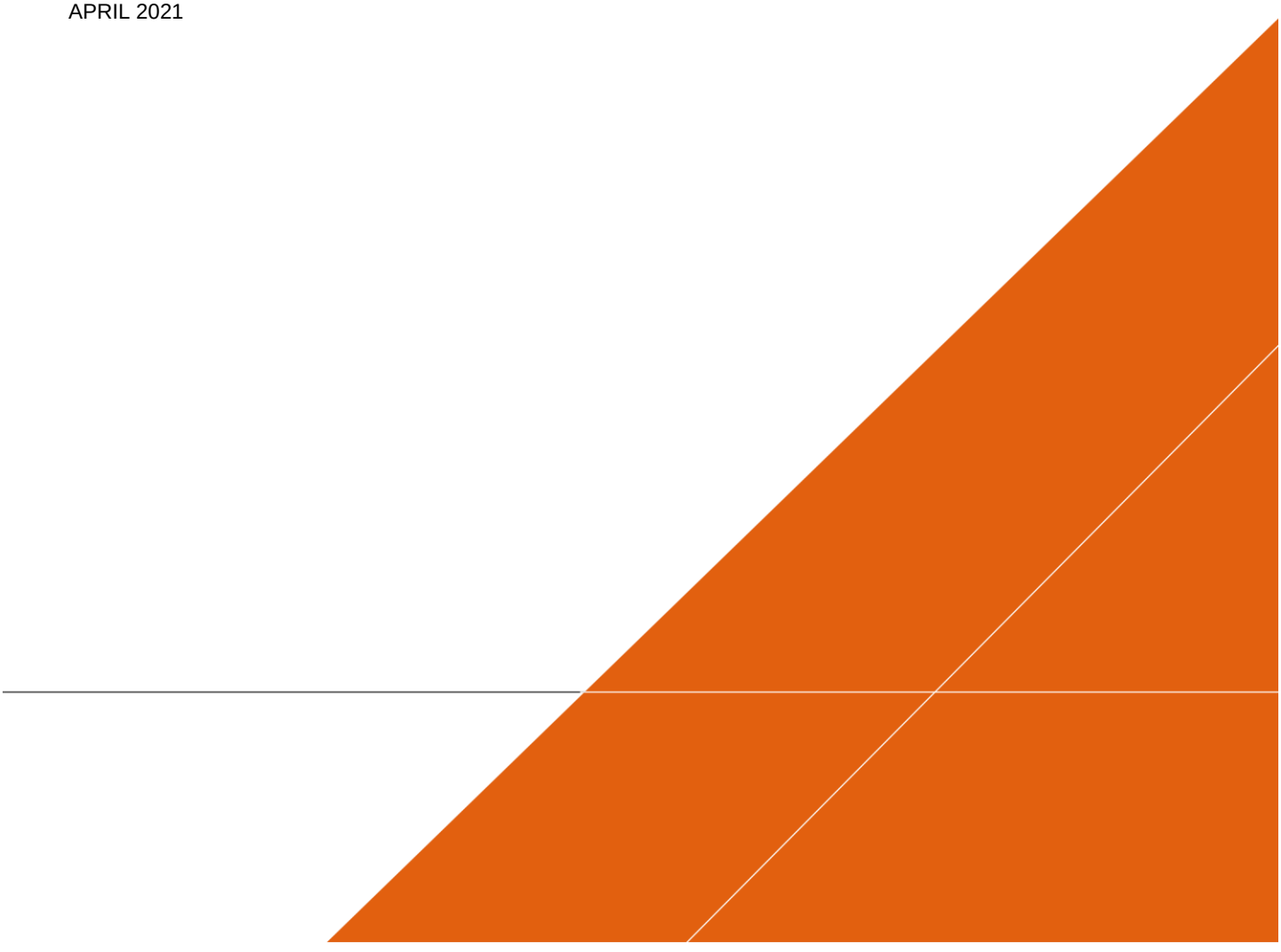
ARCADIS Design & Consultancy for natural and built assets

BE FIRST REGENERATION LTD
INNOVATIVE SITES PROGRAMME

GARAGE BLOCKS, WEST ROAD, BARKING AND DAGENHAM, RM6 6YA

Access and Highways Due Diligence Report

APRIL 2021



Garage Blocks, West Road, RM6 6YA

Access and Highways Due Diligence Report

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Report No	10046791-AUK-XX-XX-RP-HE-0009-01-West Road Access and Highways Due Diligence Report
Date	APRIL 2021

VERSION CONTROL

Version	Date	Author	Checker	Approver	Changes
01	April 2021	PJ	ZT	GH	First Issue

This report dated 07 April 2021 has been prepared for Be First Regeneration Ltd (the "Client") in accordance with the terms and conditions of appointment dated 28 January 2021 (the "Appointment") between the Client and **Arcadis (UK) Limited** ("Arcadis") for the purposes specified in the Appointment. For avoidance of doubt, no other person(s) may use or rely upon this report or its contents, and Arcadis accepts no responsibility for any such use or reliance thereon by any other third party.

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1 Introduction

1.1 Terms of Reference

Arcadis (UK) Limited (Arcadis) has been commissioned by Be First Regeneration Limited on behalf of London Borough of Barking and Dagenham (LBBD) ('the Client') to undertake due diligence appraisals in connection with a number of small sites to enable regeneration, West Road, RM6 6YA, ('the Site') is one of these.

The objective of this desktop appraisal is to provide pragmatic advice to de-risk each of the sites to reduce 'abnormal' development costs, including:

- Review existing transport, highway, access and movement related information regarding the Site and its surrounding area
- Provide outline information on potential transport and highway constraints which may impact on the land value or redevelopment potential for the Site
- Identify any potential 'abnormal' risks and future site access

The Site location is shown in Figure 1, with the site highlighted in blue.

Figure 1: Site Location Plan



1.2 Sources of Information

As part of this due diligence appraisal various sources of information have been used and are detailed below:

- Crash Map (www.crashmap.co.uk)
- Transport for London WebCAT (www.tfl.gov.uk/info-for/urban-planning-and-construction/planning-with-webcat/webcat)

1.3 Limitations and Expectations

This report has been prepared for the Client in accordance with the terms and conditions of appointment. Arcadis cannot accept any responsibility for any use of or reliance on the contents of this report by any third party. The copyright of this document, including the electronic format shall remain the property of Arcadis.

This report has been compiled from a number of sources as a desktop exercise, which Arcadis believes to be trustworthy. However, Arcadis is unable to guarantee the accuracy of information provided by others and has not undertaken site visits. The report is based on information available at the time. Consequently, there is a potential for further information to become available, which may change this report's conclusion and for which Arcadis cannot be responsible.

2 Site Setting and History

2.1 Site Location and Land Use

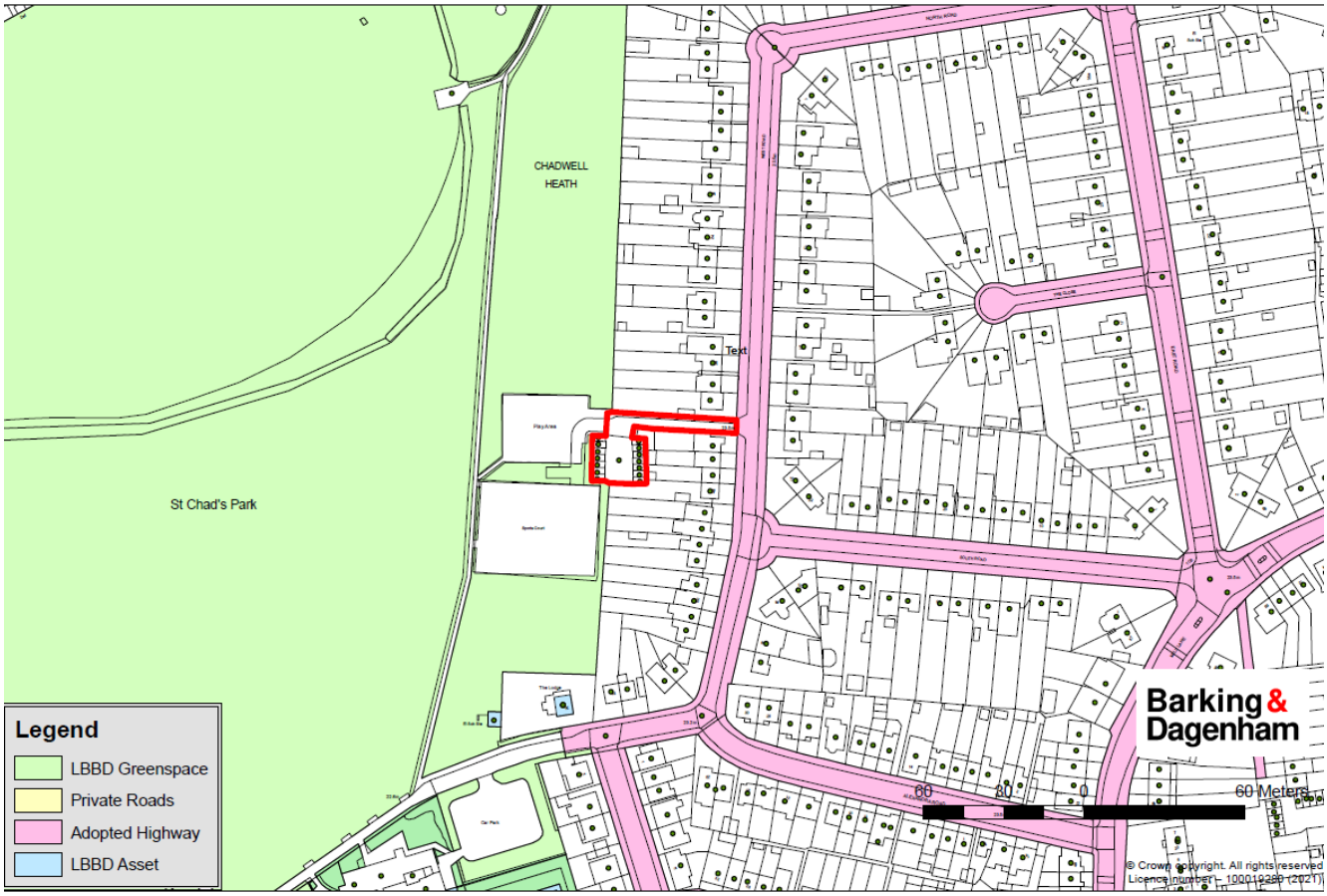
Table 1: Details relating to Site Location

Site Location / Address	Garage Blocks, West Road, RM6 6YA
National Grid Reference	547948, 188416
Description of Site	The Site comprises one plot of land off West Road which is square in shape and 0.06 ha in size. It is currently occupied by parking and 14 garages, as shown in the Site Location Plan, with garage blocks on the east and west boundaries of the Site and an area of hardstanding in front of the garages. The Site is accessible via a 3m wide single-lane access running for approximately 40m from West Road. This lane also acts as a throughway to St. Chads Park in the west and has a footway along its northern edge, providing access to pedestrians and cyclists to the park.
Surrounding Area	The Site is bounded by residential plots to the east, north and south sides. It is bordered to the west by a Sports Court and play area, part of St. Chad's Park.

2.2 Highways Register - Highway Boundary

LBBD has provided the highway boundary for the Site and its surrounding area, as shown in Figure 2. The site is accessed from the adopted highway of West Road. An unknown structure, considered a shed, has been noted north of the Site, attached to the garages on the eastern boundary. The land ownership and rights of way to this structure will required to be taken into consideration for future development.

Figure 2: Highway Status



2.3 Planning Policy

2.3.1 Draft Local Plan 2019 – 2034 – Sustainable Transport

Policy SP1 – Delivering Growth
This policy has been created to promote sustainable development throughout the borough to provide infrastructure which support's residents health and well-being by meeting the 10 Healthy New Town Principles, set out below:

1. Actively promote and enable community leadership and participation in planning, design and management of buildings, facilities and the surrounding environment and infrastructure to improve health and reduce health inequalities.
2. Reduce health inequalities through addressing wider determinants of health such as the promotion of good quality local employment, affordable housing, environmental sustainability and education and skill development.
3. Provide convenient and equitable access to innovative models of local healthcare services and social infrastructure, with the promotion of self-care and prevention of ill health.
4. Provide convenient and equitable access to a range of interesting and stimulating open spaces and natural environments ('green' and 'blue' spaces) providing informal and formal recreation opportunities for all age groups.
5. Ensure the development embodies the principles of lifetime neighbourhoods and promotes independent living.
6. Provide access to fresh, healthy and locally sourced food (e.g. community gardens, local enterprise) and provide opportunities for food growing and managing the type and quantity of fast-food outlets.

7. Encourage active travel; ensuring cycling and walking is a safer and more convenient alternative to car journeys within and without the development and providing interesting and stimulating cycle paths and footpaths.
8. Create safe, convenient, accessible, well-designed built environments and interesting public spaces and social infrastructure that encourage community participation and social inclusion for all population groups including older people, vulnerable adults, low-income groups and children.
9. Embrace the Smart Cities agenda by incorporating and future-proofing for new technology and innovation that improves health outcomes across a range of areas both at an individual level and also within the public realm.
10. Ensure workplaces, schools, indoor and outdoor sports and leisure facilities, public realm and open spaces are well-designed and managed in ways which promote an active and healthy lifestyle, including regular physical activity, healthy diet and positive mental health.

Policy SP2 – Delivering homes that meet people's needs
This Policy has been created to support the council's 10 year goal of providing housing within the areas identified within the London Plan. It states that housing should meet the needs for specific communities including disabled and vulnerable people.

Policy SP7: Planning for Integrated Transport
This policy supports the delivery of the Mayor's strategic target of 80% of all trips throughout London to be made by foot, cycle or public transport. Additionally, the policy will '*support proposals that reduce reliance on the use of the private car through incorporation of design measures and facilities to promote walking and cycling and use of public transport.*

Policy DM31: Making better connected neighbourhoods
As part of the planning application process development should be supported by a Transport Assessment/Statement to show the impact on capacity at a local or strategic level and so be fully assessed in accordance with the national or local guidelines.

Policy DM33: Cycle and car parking
This policy sets out that all development should adhere to the parking standards as set out within the Draft New London Plan and should be designed with the associated specifications. Cycle parking is to be provided in smaller secure areas and car club spaces provided within a reasonable distance of development. If a road cannot accommodate the increase of cars incurred by development and it is not possible for mitigation, the developer would be expected to meet the cost of implementing a Controlled Parking Zone (CPZ). A car free development, including spaces for disabled persons, is strongly encouraged by this policy and developers should ensure that the provision of car parking spaces does not impact on cycleways and pedestrian desire lines.

2.3.2 Local Implementation Plan 3 2019/20 – 2021/22 (LIP) – Sustainable Transport:

The LIP's overarching objective regarding transport is to deliver a package of interventions and improvements that will "*help connect people and places; promote healthy, sustainable travel; improve safety and security; and create better streets and places".*

The Local Implementation Plan document sets out Barking and Dagenham Borough's transport issues and objectives. Objectives under outcome 8 are detailed below:

- Enhancing public transport connectivity to enable growth
- Improving accessibility for all to key services and facilities
- Encouraging active travel to improve health and wellbeing
- Facilitating green travel to improve air quality and reduce the impact on the environment
- Reducing the number of casualties on our roads
- Improving safety and security across the transport network
- Managing our road space more efficiently to tackle congestion
- Transforming the public realm to create healthy, inclusive places

Residential development should therefore consider and support these objectives set out within the Local Implementation Plan 3.

2.3.3 Parking Strategy 2016-2021

The Parking strategy for the London Borough of Barking and Dagenham has been put together in recognition that '*a road network that is free from congestion and safe for car users, pedestrians and cyclist alike is vitally important'.*

It is noted that it should be recognised that there are some residential groups for whom access to parking is essential to their daily lives. The plan states that the following hierarchy of user needs should apply when making decisions regarding parking:

1. Residents with a disability
2. Non- residents with a disability
3. Local residents
4. Priority care workers
5. Local business essential servicing
6. Short stay visitors and shoppers
7. Long stay visitors and shoppers
8. Long Stay Commuters

Proposed residential development should therefore best support the aims of the Parking Strategy and consider the hierarch of user importance.

2.3.4 London Plan 2021– Parking Standards

Within the Local Plan, it is expected that development proposals will deliver patterns of land use that facilitate residents making shorter, regular trips by walking and cycling. Development proposals should demonstrate how they will deliver improvements that support the Healthy Street Indicators. In respect of car parking, the LBBD policies set out that they consist of an "*appropriate maximum number of car parking spaces consistent with the standards in the London Plan*".

The New London Plan, published in January 2021, outlines the Mayor's environmental, economic, social and transport strategic policy framework which is aimed to improve London as a region over the next 20-25 years. Chapter 10 of this document sets out the Transport policy including the Healthy Streets Indicators and the maximum car parking standards.

This document supports the implementation of the Mayors Transport Strategy and hence it is advisable to adhere to this strategy for upcoming developments. The proposed land use of the site will need to be confirmed, but for the purposes of this report the London Plan 2021, sets out maximum car parking standards taking account of PTAL. The residential car parking standards are shown in Table 2.

Table 2: Maximum residential parking standards in accordance with Table 10.3 of the London Plan 2021

Location	Number of Beds	Maximum parking provision*
Central Activities Zone Inner London Opportunity Areas Metropolitan and Major Town Centres All areas of PTAL 5 – 6 Inner London PTAL 4	All	Car free
Inner London PTAL 3	All	Up to 0.25 spaces per dwelling
Inner London PTAL 2 Outer London Opportunity Areas	All	Up to 0.5 spaces per dwelling
Inner London PTAL 0 – 1	All	Up to 0.75 spaces per dwelling
Outer London PTAL 4	1 - 2	Up to 0.5 – 0.75 spaces per dwelling +
Outer London PTAL 4	3+	Up to 0.5 – 0.75 spaces per dwelling+
Outer London PTAL 2 - 3	1 - 2	Up to 0.75 spaces per dwelling
Outer London PTAL 2 – 3	3+	Up to 1 space per dwelling
Outer London PTAL 0 - 1	1 - 2	Up to 1.5 spaces per dwelling ≙
Outer London PTAL 0 - 1	3+	Up to 1.5 spaces per dwellings ^

* Where Development Plans specify lower local maximum standards for general or operational parking, these should be followed.

~ With the exception of disabled persons parking, see Policy T6.1 Residential parking.

+ When considering development proposals that are higher density or in more accessible locations, the lower standard shown here should be applied as a maximum.

^Boroughs should consider standards that allow for higher levels of provision where there is clear evidence that this would support additional family housing.

The Site has a PTAL rating of 0, see Appendix A, and is located in outer London, therefore a maximum provision of 1.5 spaces per dwelling would be applicable, subject to the number of beds, should the proposal come forward as a residential led development on the Site.

3 Access and Movement Overview

3.1 Existing Access Arrangements

The Site currently has its main access for vehicles from West Road, east of the Site. The Site is also accessible for pedestrians and cyclists from the same road. Pedestrian access would be shared with the vehicular access point. The Site provide a 3m single-lane access that runs 40m west from West Road, this also provides the route for pedestrians and cyclists wishing to access St. Chads Park, which forms the western boundary of the Site.

3.2 Adjacent Land Uses and Amenities

The area surrounding the Site is predominantly residential land use with some shops and facilities providing goods and services. The residential dwellings generally consist of terraced and semi-detached houses, two storeys in height.

There is a varied range of amenities in the vicinity of the Site. St. Chads Park forms the western edge of the Site and is accessible via a gated access located near the entrance of the Site. Other facilities include Children's Play Area, football and cricket pitches, tennis courts, basketball area, ornamental gardens and more. The Warren Park Golf Centre, a family Golf and Leisure Park is located west of the Site on Whalebone Lane North at a walking distance of 750m.

The nearest educational institutes from the Site are Warren Comprehensive School and Warren Junior School located east of the Site at a distance of 750m on Whalebone Lane North. Various pre-schools and Day Nurseries are located south of the Site on the A118 High Road.

Chadwell Heath High Road, the A118, is located around 500m to the south of the Site, through St Chad's Park. This section can be considered as a high street, providing access to various commercial establishments including numerous retail outlets, a Post Office, Tesco Express, Sainsburys, Barclays Bank, Natwest Bank as well as various food and drinking establishments, including a number of takeaways. Further access to convenience stores and a hardware store can also be located north of the Site on East Road, at a walking distance of 550m.

For health services, Chadwell Heath Health Centre and Britannia Pharmacy are located south of the Site on A118 High Road at a walking distance of 750m and 600m respectively.

In terms of places of worship, Chadwell Heath URC Church lies 400m east of the Site on Mill Lane and Eastern Avenue Baptist Church is located 700m north of the Site.

3.3 Pedestrian Accessibility

West Road, which provides access to the Site, is a two-way single carriageway road with footways on both sides of the road. To the east, West Road connects to East Road via North Road which are also two-way single carriageway roads with footways on both sides. East Road meets Eastern Avenue West/Warren Terrace at a three-arm priority junction to the north which has a footway running on the southern side of the carriageway only. A subway is present on this road connecting Warren Terrace/Eastern Avenue West with Padnall Road across the A12 Eastern Avenue West.

To the west of the site, footpaths are available around the edge of St Chad's Park. These footpaths provide access though the park to Japan Road. Japan Road is a two-way cul-de-sac, with footways on both sides of the road. Japan Road connects the park to the A118 High Road, a predominantly traffic free route to Chadwell Heath high street.

The area surrounding the Site is residential and the roads providing access to them have footways present on both the sides of the road. Most of the locations on the local highway network have dropped kerbs and tactile paving where there are footways on the adjacent side. St Chad's Park, with the footpaths around the edge, provide further traffic free routes to the west and south of the site.

3.4 Cycle Infrastructure

There are no National Cycle Routes (NCR) easily accessible within the vicinity of the Site. The closest NCR is NCR 13, located approximately 5.5km south of the Site. It is a 220 km long route, connecting London in the west to Dereham in the north. Another NCR 136, which is known as The Ingreborne Valley Way, provides a connection between Rainham with the village of Noak Hill in north via Upminster, and is located approximately 8.7km east of the Site,

Local cycle routes are available close to the site via Local Cycle Route (LCR) 57 which runs along the Whalebone Lane North, east of the Site and has marked cycle lanes on both the sides of the carriageway on most of the stretch. Another LCR 12, is easily accessible to the south of the site, along the A118 High Road, which provides marked cycle lanes on both the sides of the carriageway for most of the stretch through the high street section.

Cyclists are also permitted to use the paths through St Chads Park, which are shared paths, providing cyclists give-priority to pedestrians. The routes through St. Chads Park connect to Chadville Gardens in north, Japan Road to the south, Park Lane and Percival Gardens in west.

Cycle parking is provided within the St. Chads Car Park, south of the Site. Cycle parking is also provided along the A118 High Road serving the high street.

3.5 Parking

There are no parking restrictions on the roads in the vicinity of the Site and vehicles are noted to be parking on the kerb and footpaths in the surrounding streets. There are restrictions for Good Vehicles exceeding 7.5 tonnes, except for access, on Mill Lane.

Alexandra Road, Edward Road, Mayfair Avenue and Lee Avenue which run south of the Site are part of Controlled Parking Zone (CPZ) CH and have parking restrictions with Residents Permit only Monday to Friday between 08:30 and 17:30.

3.6 Analysis of Collision Data

An indicative analysis of the most up to date five-year period of collision data has been undertaken using the DfT registration of collisions, accessible via Crashmap.co.uk. Please note, no details of collisions have been requested, only statistics. An extract from Crashmap showing the exact locations of the incidents can be viewed within Appendix B.

Within the immediate vicinity of the Site, there have been no collisions on the residential roads, including West Road, North Road and South Road. There has been one incident of slight severity on East Road.

Three incidents occurred on Mill Lane, which forms the eastern arm of the East Road/Mill Lane/South Road four-arm priority junction. Two were of slight severity and one serious in severity. Another serious severity incident was recorded at Mill Lane/Whalebone Lane North three arm priority junction.

A number of incidents were recorded along Whalebone Lane North in the east, High Road in the south, A12 Eastern Avenue West/A1112 Whalebone Lane North four arm signalised junction northeast of the Site and the A1112 Whalebone Lane North/A118 High Road/ A1112 Whalebone Lane South four-rm signalised junction located southeast of the Site. There were no fatal collisions recorded.

The collisions recorded can be predominantly attributed to driver error and are not considered connected to the layout of the highway network and no further measures should be taken at this time.

4 Future Site Access and Considered Risks

For the purpose of the analysis of this report, it has been assumed that the Site would primarily be considered for a future residential led development. In the context of the surrounding area, this would be deemed appropriate due to the predominantly residential setting.

This could take the form of a single block or individual units in a similar scale to the neighbouring buildings. The site has an existing two-way lane access, which has the capacity to support a small scale residential led development.

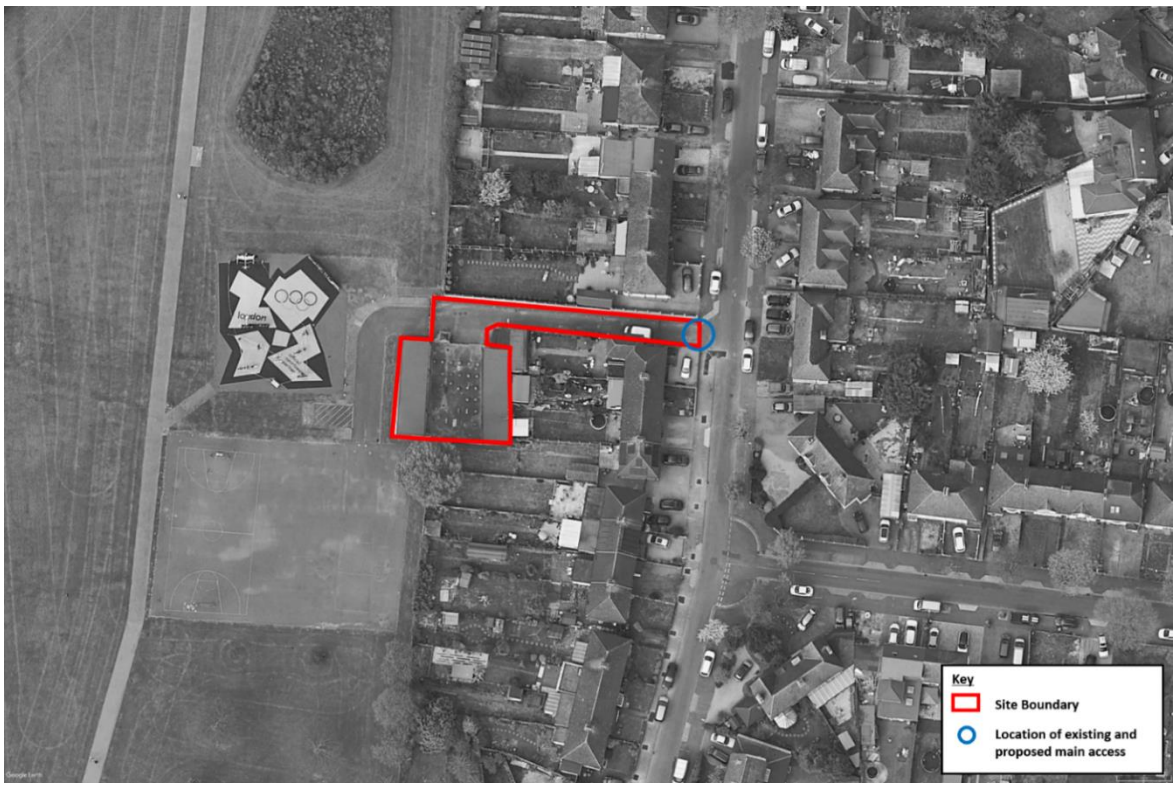
The Site currently has a direct vehicle access for all modes via West Road. The location is considered suitable, as access is already established, meaning that future use as a private car access and pedestrian access is unlikely to raise any concerns from a highway perspective. Service and emergency access will need to be considered in any future design, including the access into and out of the Site as well as on-site turning facilities which are likely required, and may also be required to comply with planning guidance.

The viability of the vehicular access would unlikely be disputed and the land surrounding the area, both the carriageway and the footway west of the carriageway have been identified as adopted. The single lane access from West Road to the Site, acts as a through way to St. Chads Park and has a pedestrian footway on its northern edge providing access for pedestrians and cyclists to St. Chads Park. There are no identified land ownership issues with regards to the access of the Site. However, an unknown structure is present north of the Site attached to the garages on the eastern boundary, which is not part of the Site. The land ownership and right of way for it will required to be considered for any future development.

Visibility from the Site is currently noted as being partially obstructed with on-street parking close to the Site access. Subject to a more detailed analysis, that may set out the removal of the on-street parking, the access road is on a flat terrain that allow sufficient visibility for drivers of the Site. The access option is illustrated in Figure 3.

Connections from the Site provide the opportunity for any future development to promote trips by sustainable travel modes, which will have inclusion and environmental benefits.

Figure 3: Access Option (Background Source – Google)



5 Conclusions and Recommendations

5.1 Conclusions

The Site is considered to be suitable to support a residential led development use, with a comparison of a similar sized plots nearby being utilised for residential purposes. Existing access arrangements for the Site have the potential to be maintained. However, the feasibility of this would need to be assessed as part of any future detailed design consideration.

Table 3: Summary

Current Access	Vehicular access currently achieved directly via West Road. Pedestrian and cyclist access are also provided via West Road or through St Chads Park.
Surrounding Area	The Site is bounded by residential plots to the east, north and south sides. It is bordered to the west by a Sports Court and play area, part of St. Chad's Park, a public open space which includes Children's Play Area, football and cricket pitches, tennis courts, basketball area, ornamental gardens and more.
Current Visibility	Visibility from the existing site access will need to be assessed in terms of whether on-street parking creates a constraint. Subject to this detailed assessment, the existing access and the Site is on a flat terrain, and could allow sufficient visibility for drivers and existing users of the Site
Current Restrictions	The visibility of any future access will have to meet the visibility splay standards such that it would not prejudice highway safety for all highway users.
Access Solutions	Access could be maintained at the existing point of access, as it is established and currently considered viable for its purpose. A footway is provided on the north side of the access
Risks	The footways and carriageways surrounding the Site have been identified as adopted, therefore there would be no risk associated with land ownership and wider highway access. An unknown structure located on the northern edge of the Site adjacent to the garages on the east, is not a part of the Site, the land ownership and rights of way to this structure will need to be taken into consideration for any future development. Future design will need to consider servicing and emergency vehicle access and the possible requirements to turn within the Site. The design of the access which the Site shares with St. Chads Park, has a pedestrian footway along its northern edge leading to the park to allow for shared use between vehicles, pedestrians and cyclist movements will need careful consideration. On-street parking is noted as being within the visibility splay of the existing access. Although this is no worse than the existing situation, analysis should be undertaken during the design process in the future stages of the Site development. Analysis of any future development is likely for the West Road Site for residential led development which may result in a reduction in vehicle movements using the access compared to it extant use, as a garage block at present.

5.2 Recommended Works to De-Risk Site

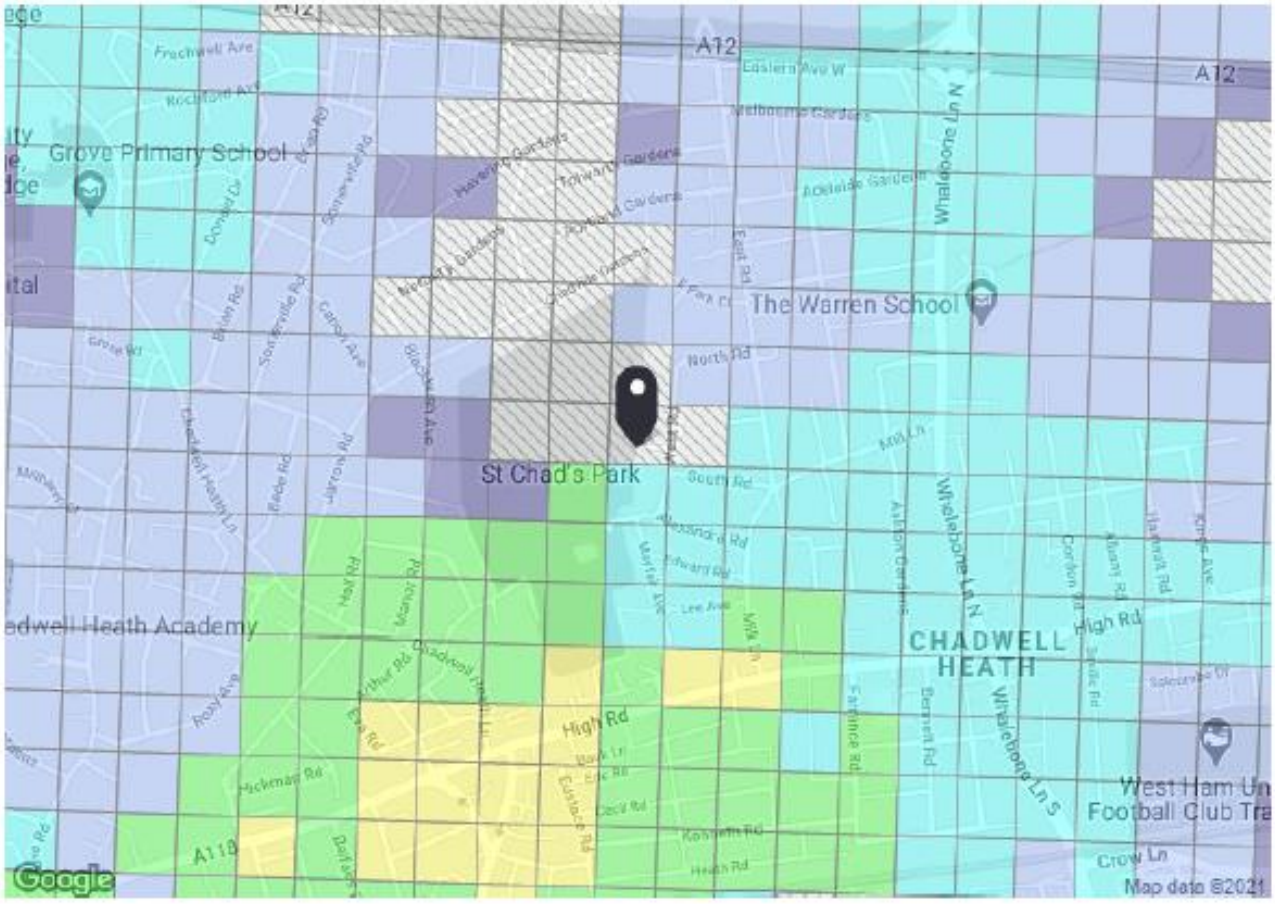
Further investigation into access options for all modes is required and an access strategy for all modes should be established prior to commencement of any detailed work. Visibility from the existing access will need to be considered in development designs to mitigate highway safety concerns such that they are not compromised. Future detailed design will need to consider servicing and emergency vehicle access arrangements, and swept path analysis will need to be considered to inform vehicle turning requirements.

Depending on the scale of proposed future development, it would be useful to undertake a high-level trip generation analysis, site visit and Active Travel Zone assessment, as a comparison to the existing use of the Site to provide an indication of the impact on the surrounding highway network and how the Site would encourage walking and cycling and public transport access.

To establish the full requirements for planning application submission, discussions with colleagues at the London Borough of Barking and Dagenham will need to be undertaken.

APPENDIX A

PTAL Report



PTAL output for Base Year

0

50 West Rd, Chadwell Heath, Dagenham, Romford RM6 6YB, UK
Easting: 547948, Northing: 188416

Grid Cell: 123254

Report generated: 25/03/2021

Map key- PTAL

0 (Worst) | 1a
1b | 2
3 | 4
5 | 6a
6b (Best)

Map layers

PTAL (cell size: 100m)

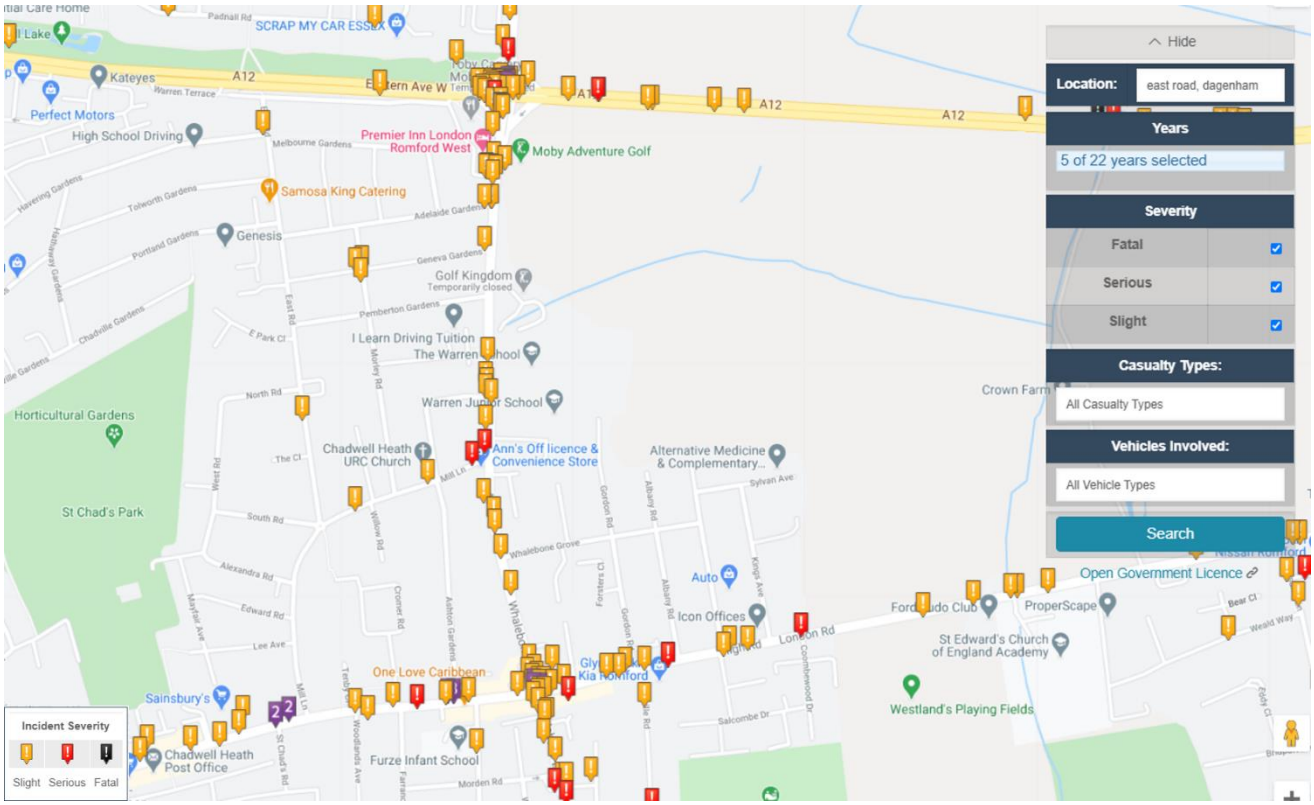
Calculation Parameters

Day of Week	M-F
Time Period	AM Peak
Walk Speed	4.8 kph
Bus Node Max. Walk Access Time (mins)	8
Bus Reliability Factor	2.0
LU Station Max. Walk Access Time (mins)	12
LU Reliability Factor	0.75
National Rail Station Max. Walk Access Time (mins)	12
National Rail Reliability Factor	0.75

Calculation data

APPENDIX B

Crashmap Figure



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