



# THE GOODSYARD

Design and Access Statement

September 2019 - Part 14 of 21



ballymore.



## 6.3 PLOT 7 - GROUND FLOOR AND RETAIL STRATEGY

### 6.3.1 Introduction

### 6.3.2 Context within the development site

Plot 7 comprises three parts:

- The Oriel Gateway (*Plot 7A*)
- The Braithwaite Viaduct (*Plots 7B, 7C, 7D*)
- London Road (*Plot 7E*)

### 6.3.3 The Oriel Gateway (Plot 7A)

The Oriel Gateway (Plot 7A) is the smallest part in Plot 7, and sits wholly within the London Borough of Hackney. Located at the western edge of The Goodsyard site, 7A has prime retail frontage on Shoreditch High Street and Commercial Street.

Plot 7A boasts some of the site's key historic features, all of which have Grade II listed status, including:

- The Oriel
- Forecourt walls
- Two gates
- Gateposts
- The historic winding mechanism (within the adjacent wall)

Given this Grade II listed status, Plot 7A is submitted with full details for Listed Building Consent and planning approval. Application 1 will contain the works proposed for Plot 7A; further detail can be found in Section 1.3.3.

### 6.3.4 The Braithwaite Viaduct (Plots 7B, 7C, 7D)

The Grade II listed Braithwaite Viaduct and adjoining unlisted arches, occupies the largest part of Plot 7.

The Viaduct sits wholly within the London Borough of Tower Hamlets. It is centrally located within The Goodsyard masterplan, bounded by Middle Road to the north, Brick Lane to the east, rail tracks to the south and Braithwaite Street to the west. The Viaduct is subdivided by historic north-south connections Farthing Lane and Cygnet Lane into three plots: 7B, 7C, 7D.

The central location of the Viaduct means that it is surrounded by a variety of different edge conditions and characters. The illustrative designs for the surrounding and adjacent plots have been developed to acknowledge and work with the historic fabric in Plot 7.

Although only single storey, the Viaduct arches are of an industrial scale and carry much weight in the shaping of the illustrative design. As such, the north and south elevations of the arches play an important role in conveying the character of the site. This relationship is demonstrated most clearly in the design of Plot 10, where the building's materiality deliberately complements the Viaduct. The compositional grid of the Plot 10 elevation has been carefully composed to complement the rhythm of the listed arches; Section 5.7 explores this relationship in more detail.

Given the Grade II listed status of the Viaduct, Plots 7B, 7C and 7D these are also submitted with full details for Listed Building Consent and planning approval. Further detail can be found in Section 1.3.3.











### 6.3.5 London Road (Plot 7E)

London Road is a historic route, now closed, which runs east-west on the site. The route is divided by Braithwaite and Wheler Streets, with Plot 7E sitting to the east, wholly within the London Borough of Tower Hamlets. The western part of London Road, now part of Plot 3, extends to Commercial Street. For clarity, references to London Road in this report will focus on Plot 7E only.

As indicated on the plan opposite, London Road sits to the south of the Viaduct, adjacent to the main line railway. It incorporates the historic Boiler Room, which houses one of the site's largest heritage engineering features - the hydraulic accumulator.

London Road is not listed. However, it is of historic interest and importance; in developing the revised scheme the team have been conscious to preserve and celebrate the historic features that lie along this route.

Given the non-listed status of London Road, Plot 7E remains part of the amended outline application..

	Full details submitted		A1
	Listed Building Application Boundary		A1 (food business)
	Plot 7E		A3
	Plot Boundary		A5
	Site Boundary		
	Borough Boundary		



12



11 10



1



2



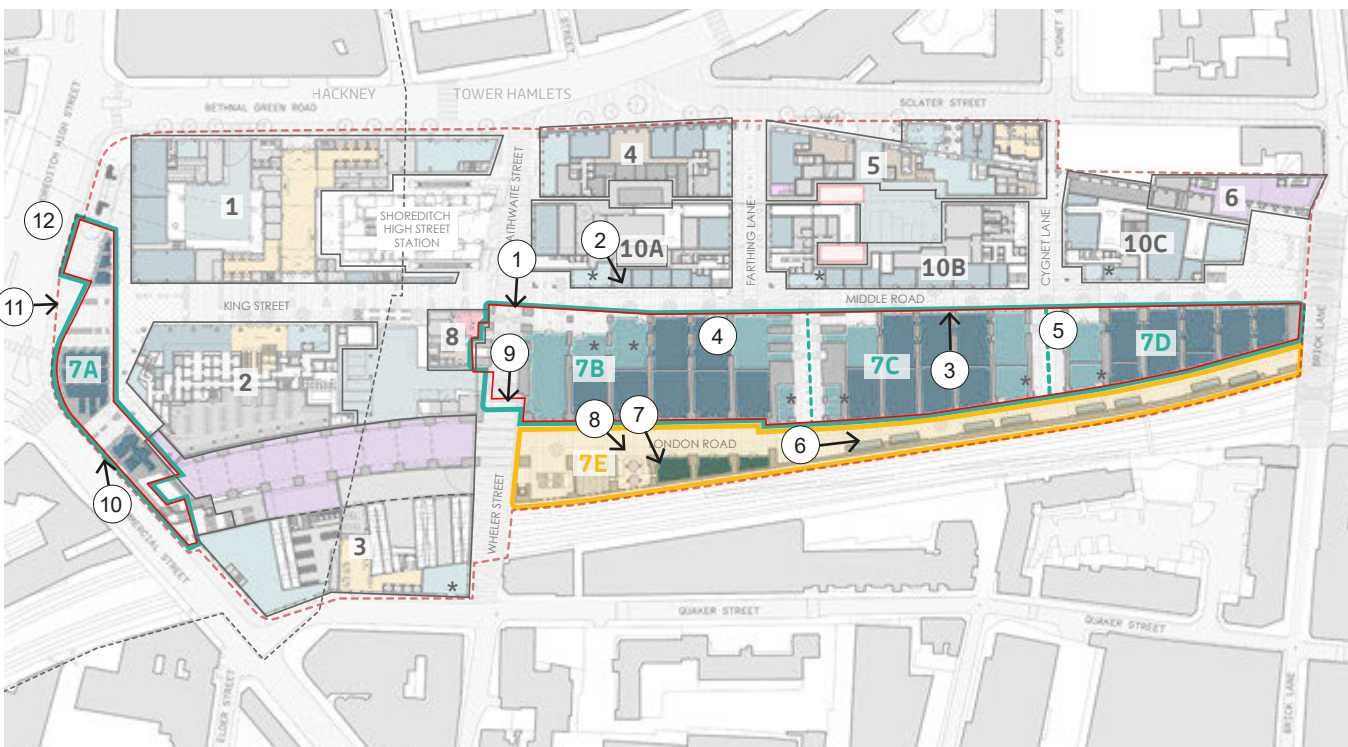
3



4



5 6



9



8



7



Fig 6.3.1: Plot 7 application boundaries and site views



### 6.3.6 Context within the site-wide retail strategy

The retail strategy has been principally shaped by two of the Design Principles:

The first is the creative re-use of the existing structures to give an authentic shape to the proposed development. The reuse of the structures dictates that this shape is aligned to the historic grain of the site. Currently much of this historic fabric is inaccessible to the public. By re-using the structures to shape the heart of the masterplan, they are opened up to the public and given new purpose for future generations.

The second, in respecting the context and history of the site, routes have been created that not only bring appropriate scale to the plots and re-purposed spaces but also provide the opportunity to create a retail character zone that is founded on the retained character of historic structures. This strategy will bring great variety and varied character to the site-wide retail offering.

Given the unique character of the historic arches of the Braithwaite Viaduct and London Road, and the curved frontage of the landmark Oriel Gateway, Plot 7 plays a significant role in defining the Goodsyards identity as a landmark and destination. These features and the format of retail delivered will play a significant role in delivering the project vision of creating a vibrant and characterful mixed use place founded on the sites rich history.

Section 3.5 contains further information on the site-wide retail strategy.

### 6.3.7 Plot 7 Brief

The brief for Plot 7 is to create an animated and vibrant ground plane that is a positive addition to the commercial vitality of this part of East London. It is important that the streets and spaces created link seamlessly with the context so that the contextual character can influence the site, whilst new shops restaurants and studios found on site can add to the rich commercial street based townscape found close by.

The strategy at the Goodsyards is to curate a variety of units, creating a place that is an engaging place to visit and a tapestry with a vibrant commercial offer. The historic fabric provides a small footprint to the units but with a wide range of unit formats and sizes. This will enable the space on offer to meet a variety of needs.

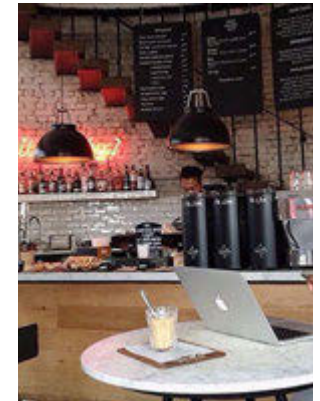
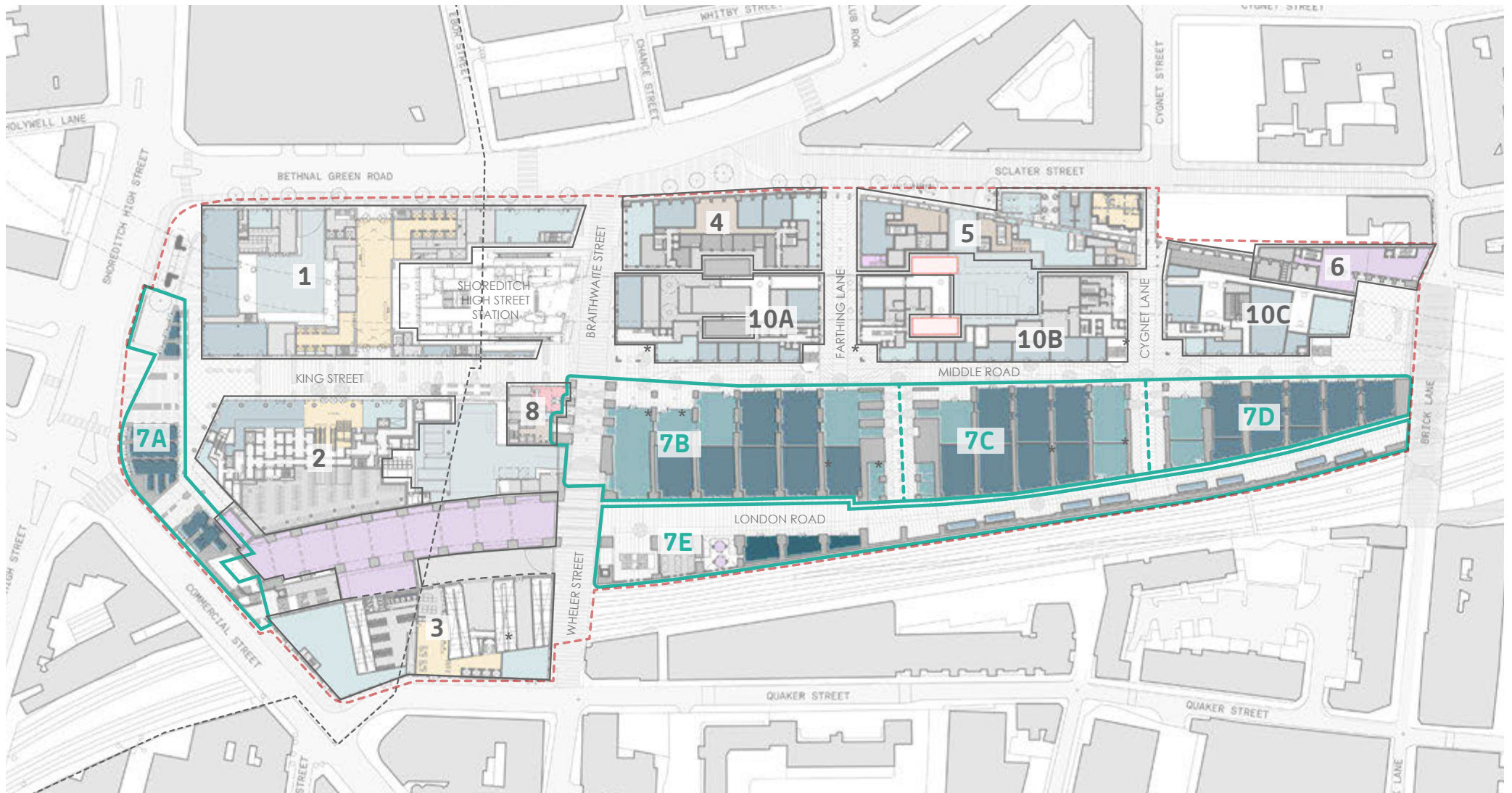


Fig 6.3.2: Shoreditch shops, eateries and hangouts



- Plot 7 Boundary
- Plot Boundary
- Site Boundary
- Borough Boundary
- A1
- \* A1 (food business)
- A3
- A5

Fig 6.3.3: Plot 7 within the context of the wider Goodsyards masterplan



### 6.3.8 Historic Context

The history of the site and current condition of the existing, surviving structures are discussed in detail in the Heritage Statement (2019) and in Section 2.5 of this report.

Following the devastating fire in 1964, the Goods Yard site lay derelict until half of the site was demolished and redeveloped as part of the East London Line Extension. During that time, the site was home to a karting arena, which included a kart track plus facilities.

Today, the site is home to 13+ 5-a-side football pitches, with facilities.

### 6.3.9 Oriel Gateway (Plot 7A): Historical Uses

Historically, the two parts of Plot 7 played very different roles in the functioning of the Bishopsgate Goods Yard.

The Oriel Gateway (Plot 7A) was, and remains today, the main entrance into the site. As such the spaces contained within these arches originally housed offices, stores, domestic rooms and security in the form of a police office.

Historic photos show the arches facing onto Shoreditch High Street and Commercial Street as retail units. It is likely that there has been a retail offering within the Oriel portion of the boundary wall since the site began redevelopment from Shoreditch Terminus to Goods Yard in 1881.



Fig 6.3.4: Historic images of the Oriel Gateway and Shoreditch High Street



- Plot 7A Boundary
- Historic arches and Goodsyrd Structure
- [From photographs] Retail

Fig 6.3.5: Historic ground floor plan of the Oriel Gateway





Fig 6.3.8: Hidden Art Open Studios and Fair 1999, The Goods Yard Market



Fig 6.3.6: Aerial photograph showing the site after the demolition of platforms

The yellow arrows indicate where three wagon hoists were located. Note too the red arrows which highlight the two ramps up to platform level



Fig 6.3.7: Aerial photograph showing the karting arena, constructed 2001

In addition to the karting, (indicated above ●) the site was home to a number of other businesses - these included a car breaker (●), which can be seen at the eastern of the site.

### 6.3.10 The Braithwaite Viaduct (Plots 7B, 7C, 7D) and London Road (Plot 7E): Historical Uses

The Viaduct arches were historically used for the receipt/distribution and storage of incoming and outgoing goods. A fruit, vegetable and fish market operated in the basement level from 1882-1884.

Historic plans indicate that these arches tapped into the wider network of tracks across the site, some of which still exist today along London Road (Plot 7E). This explains the platforms and level changes within these arches.

### 6.3.11 Retail in the Viaduct: Recent History

In 1999 Bishopsgate Space Management Ltd redeveloped the remaining part of the site (much of the historic structure was damaged or destroyed by fire). The redevelopment included a wide range of uses, including manufacturing facilities, artists' studios, workshops, leisure facilities, a small swimming pool, fitness centre, office accommodation and restaurants. The swimming pool carcass still exists in Plot 7B today.

Included in this schedule of new activities and uses was a Sunday Market, which was established under part of the surviving Braithwaite Viaduct. The success of this new market led to oversubscription and a second, larger market, The Goods Yard Market, was opened later that same year.



Fig 6.3.9: The swimming pool, as existing

### 6.3.12 Plot Constraints

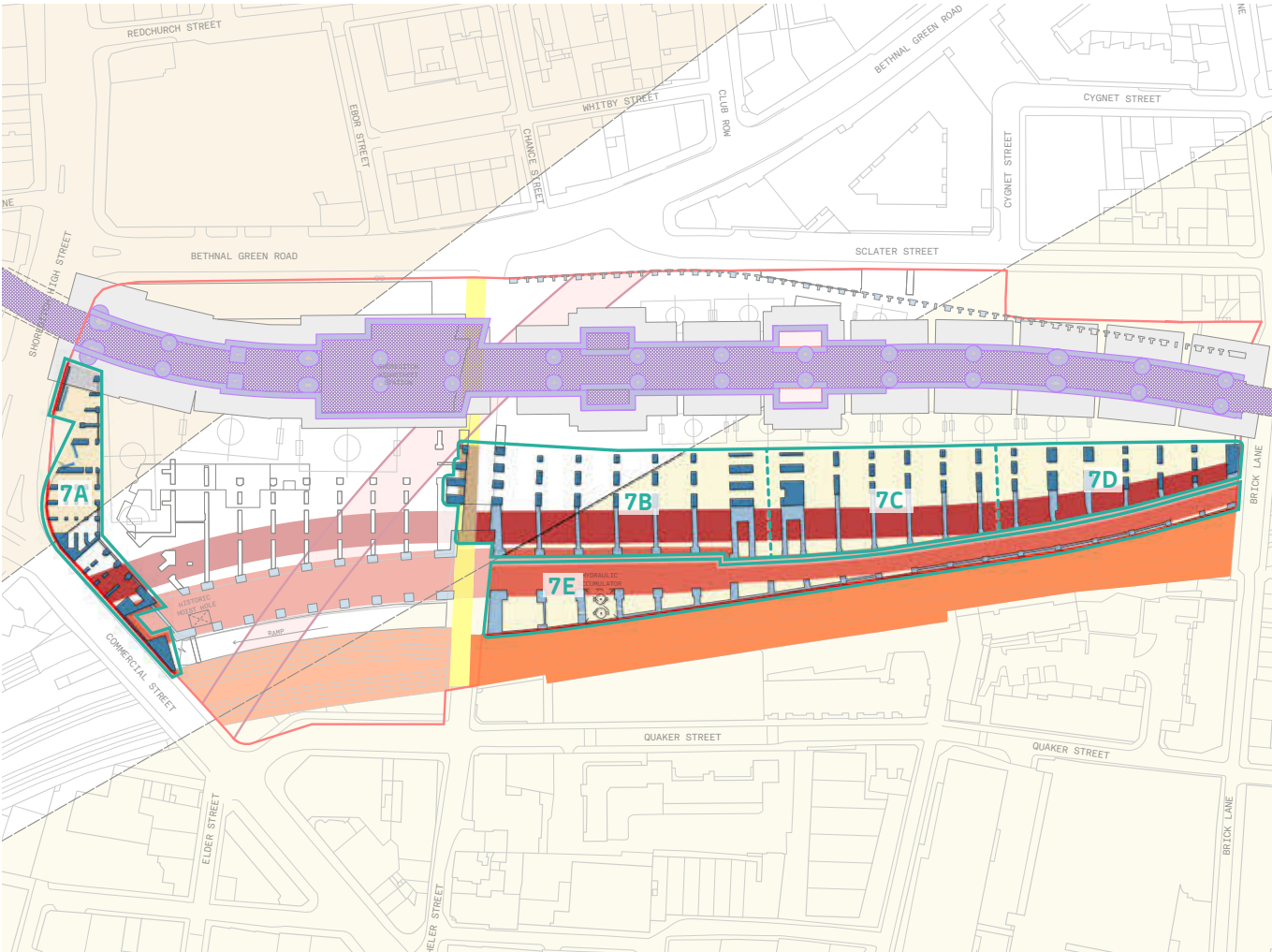
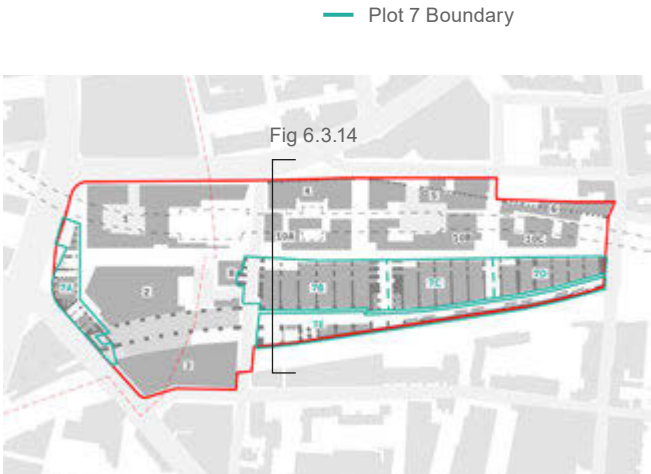
The ground level arrangement of retail spaces is heavily influenced by a number of site constraints.

These constraints predominantly consist of the site's existing buildings/structures above and below ground - in particular existing fabric that is listed and/or historic.

The site constraints exist at various levels and are three dimensionally complicated including:

- Existing below ground infrastructure and foundations for listed structures above
- Existing street levels (on and off site)
- Existing listed structures at ground level
- New modern structures which have been built above ground.

Further detail on the listing of heritage structures on site can be found in Section 2 of the Heritage Statement (2019).



- |                      |                                      |                                       |
|----------------------|--------------------------------------|---------------------------------------|
| Application Boundary | London Overground Rail Line          | Grade II Listed Heritage Asset        |
| Plot 7 Boundary      | Zone reserved for Expansion          | Non-Listed Heritage Asset             |
| BT Tunnel            | London Overground Foundation Zone    | Existing Structure to be Demolished   |
| Main Line            | London Overground 2m Inspection Zone | Westminster Pier LMVF View Cone       |
| Suburban Rail Line   | Underground (Central Line)           | King Henry VII's Mound LMVF View Cone |
| 8 Track Reserve      |                                      |                                       |

Fig 6.3.11: Key Plan

Fig 6.3.10: Plot 7 constraints





Fig 6.3.12: Existing level changes within the Viaduct [Plots 7B,7C,7D]



Fig 6.3.13: The Oriel [Plot 7A]

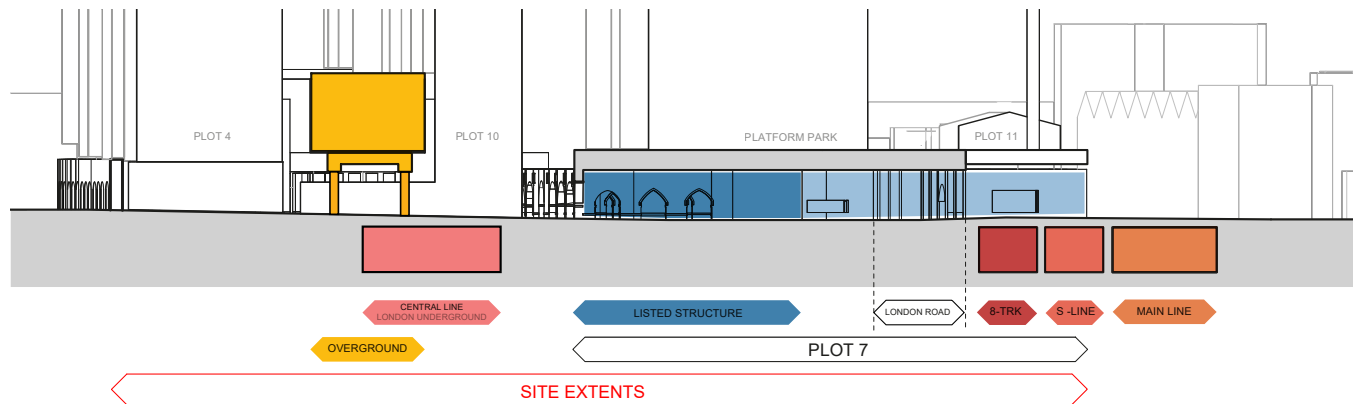


Fig 6.3.14: Section through Plot 7B showing key constraints

A considerable number of constraints and factors will influence the way in which the ground floor can be shaped.

For Plot 7A, these include:

- Levels between Shoreditch High Street and the Oriel Gateway
- The existing arch structures, which provide challenges for the integration of modern mechanical electrical service equipment
- The restoration and meaningful revival of the landmark Oriel structure

For Plots 7B, 7C and 7D, in addition to respecting the existing listed Viaduct structures, further constraints include:

- Level changes within the arches and the presence of historic platforms, ramps and staircases. This will require the installation of a new floor slab to ensure the two proposed retail streets and their shops are fully inclusive.
- The length of the proposed Middle Road and London Road, which present challenges for curating the retail offering and ensuring these streets are active, engaging and welcoming.

Plot 7E's primary concern is towards the main line railway which lies to the south, bringing with it constraints that include:

- Rail operator requirements for access for maintenance
- Rail operator requirements to screen the railway from the site
- TfL requirements with regards to their assets



Fig 6.3.15: Main line railway tracks to the south of Plot 7E

6.3.13 Existing Heritage

6.3.14 Listed structures and historic significance

The adjacent diagram proposes the varying levels of significance attached to the existing structures on site. Details regarding the site-wide Heritage Strategy, and all the heritage structures and their original functions can be found in Section 4 of the Heritage Statement (2019). Further information on the location and condition of these existing features, details and materials are contained within Plowman Craven's Survey information and the Heritage Statement; Appendix A: Bishopsgate Goods Yard - Audit of Historic Structures and Heritage Assets (2019).

The team consider, and have verified through consultation, that the existing structures in Plot 7 are highly significant assets within the development site and this part of London. This is confirmed by the Grade II Listed status of much of the existing Plot 7 structures. The listing emphasises their significance within the wider Goodsyard site and within the wider context. These features have the potential to play a major role in creating the character of a re-purposed Goodsyard.

The proposals set out in detail in the following sections of this report acknowledge and reflect this importance. It is proposed to retain the majority of the existing structures in Plot 7; the aim is to repair and reuse the existing historic fabric with minimal and respectful structural interventions.

The scope of demolitions and structural interventions within Plot 7 are discussed further in Section 4 (Demolition of Unlisted Structures) of the Heritage Statement and Extent of Demolition Drawings (LBC drawings A-05\_10-010; 011; 012).

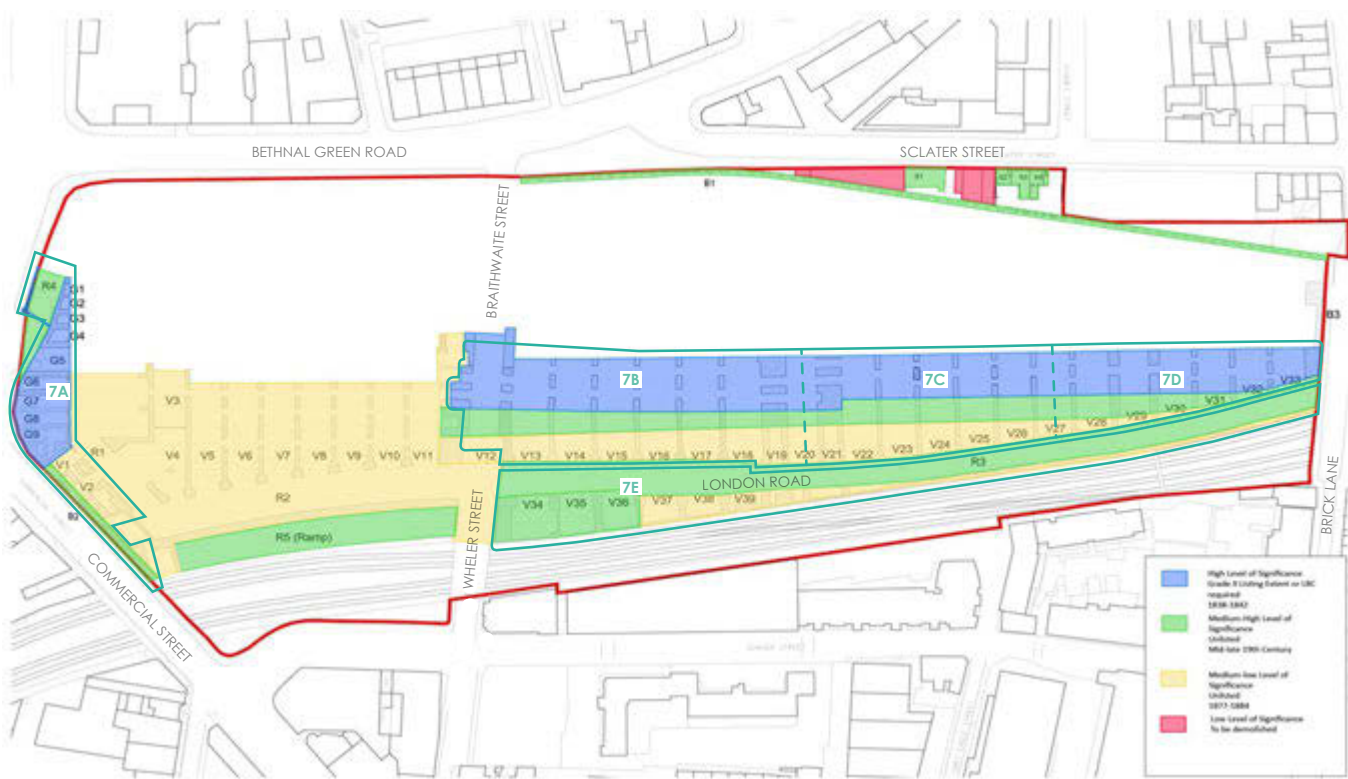


Fig 6.3.17: KMH's heritage significance plan for the existing site structures

- Application Boundary
- Plot 7 Boundaries
- High level of significance  
Grade II Listed, LBC  
required
- Medium – High level of  
significance  
Unlisted
- Medium – Low level of  
significance  
Unlisted
- Low level of significance  
Unlisted



Fig 6.3.16: Hoarded Oriel Gateway



Fig 6.3.18: Hoarded Braithwaite Viaduct





Fig 6.3.20: The Oriel Gateway heritage feature location plan (Plot 7A)



Fig 6.3.19: The Oriel Gateway



Fig 6.3.21: The winding mechanism



Fig 6.3.22: Gateposts and gates

### 6.3.15 The Oriel Gateway (Plot 7A)

The Oriel Gateway comprises numerous heritage features including:

- The masonry arches - forming the gateway wall
- The listed gates and gateposts - made of wrought iron, restored and reinstated in 2010 and currently stored for protection
- The winding mechanism - integrated within the smaller free standing wall upon Shoreditch High Street, also restored in 2010
- The Oriel - a prominent moulded stone feature projecting out from the top of the gateway wall. Over the years it has lost some of its crowning stonework detailing. It is proposed that these details are reinstated as part of the restoration works proposed in the Listed Building Application.



Fig 6.3.23: The Braithwaite Viaduct (Plots 7B, C, D)



### 6.3.16 The Braithwaite Viaduct (Plots 7B, 7C, 7D)

The Grade II Listed brick Viaduct, and adjoining non-listed arches, boast a wealth of heritage features. These include, amongst others, painted advertising, signage and remnants of its industrial past such as platforms, ramps and rail tracks.

### 6.3.17 London Road (Plot 7E)

This route still retains its cobblestones, rail tracks and turntables. In addition, the Boiler Room, which sits to the south of London Road, houses the largest piece of historic engineering machinery that survives on site - the hydraulic accumulator.

Section 4.0 explores how these features will be restored and incorporated in the site-wide landscaping strategy. Section 6.3.50 explores how the Boiler Room and the accumulator will be revived as destinations for visitors to explore the site's rich history.



Fig 6.3.24: London Road, view towards Brick Lane (Plot 7E)



### 6.3.18 Existing materials, patina and heritage features

Plot 7 boasts existing structures and buildings rich with industrial and railway heritage. It is proposed that this materiality, detailing and patina is preserved. Each part of Plot 7 boasts their own distinct materiality; these are indicated in the selection of site images opposite.

It will be a tenant requirement to respect the existing patina of the Listed Viaduct, Oriel and adjoining historic arches when developing and undertaking shop fit-outs. The detailed proposals for the Plot 7 shopfronts acknowledge the importance of these heritage features, and promote a 'light-touch' towards fixing to historic fabric. Design guidance and design development is explored in the following design proposals.

The Outline Landscape Strategy and Design Guidelines (Section 4.0) give an indication of how existing granite sets, railway lines, turntables and other valuable features that currently exist on site might be incorporated into the design proposals.



Fig 6.3.25: The Oriel (Plot 7A) materiality



Fig 6.3.26: The Viaduct (Plots 7B, 7C, 7D) materiality

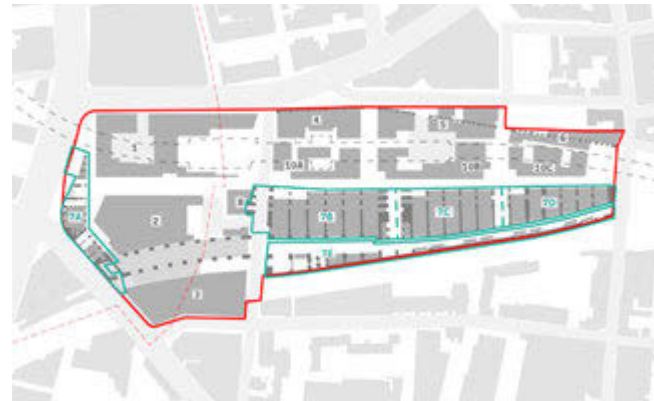
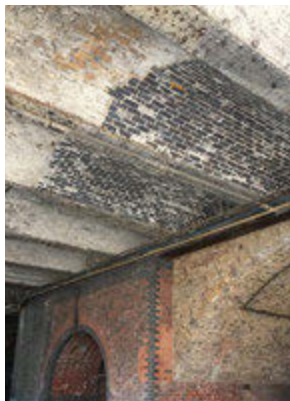


Fig 6.3.28: Plot key plan

Fig 6.3.27: London Road (Plot 7E) materiality





Fig 6.3.29: The hydraulic accumulator [clockwise from top: view from London Road; surviving columns; historic image with debris]

### 6.3.19 Plot 7E: The Hydraulic Accumulator and Basements

The largest and most significant piece of existing engineering machinery that remains on site is the hydraulic accumulator, which sits within arch V36 in Plot 7B on the south side of London Road.

The hydraulic accumulator sits within the old Boiler Room, comprising two double height volumes (track level to park), and in the 19th century would have been responsible for providing hydraulic pressure to power lifts and hoists throughout The Goods Yard. Whilst not listed, the hydraulic accumulator is a unique and important fragment of the site's rich industrial heritage. Therefore the team strongly believes that the proposal must celebrate the engineering and allow for visibility of the structure from London Road.

It is proposed that the hydraulic accumulator is restored and made accessible to the public as a visitor attraction, with a new visitor platform proposed off London Road. This will be supported by a designated education and visitor offering, located in the adjoining spaces at basement level. This proposal is explored in further detail in Section 6.3.50.

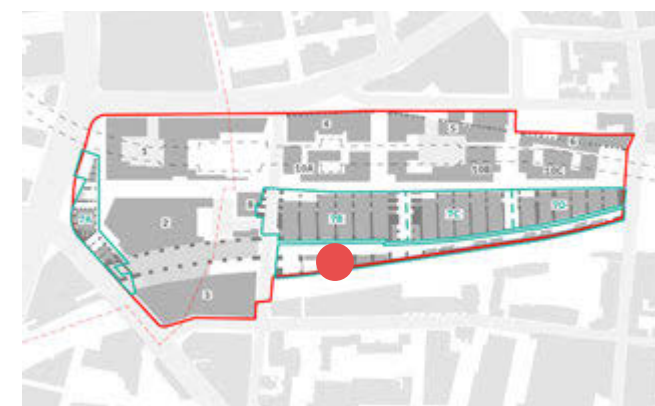


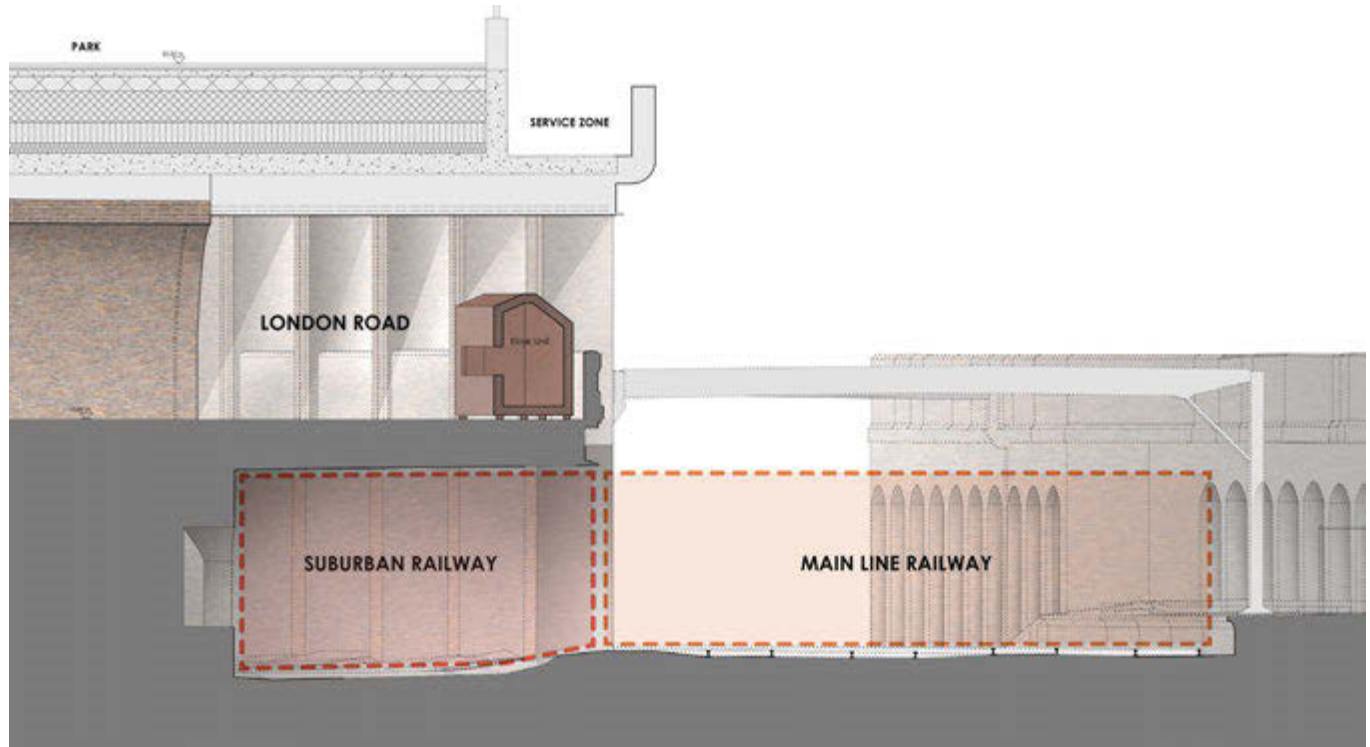
Fig 6.3.30: Key plan: hydraulic accumulator, Plot 7E

### 6.3.20 London Road (Plot 7E)

London Road is an existing route that runs east-west to the south of the viaduct (Plots 7B, 7C, 7D), between Brick Lane and Braithwaite Street. It is currently not publicly accessible and not used for vehicular traffic.

Section 4 and Appendix A of the Heritage Statement (2019) and Plowman and Craven's Structural and Condition Survey discuss this element of construction in detail. The survey highlights the poor and deteriorating condition of London Road structure. Though it requires extensive restoration, bringing London Road back into use is vital for the scheme for the following reasons:

- Whilst London Road is not listed, it adjoins the Grade II listed Braithwaite Viaduct. The relationship between the Viaduct and London Road has existed on site since the 1870s, and is the largest part of the remaining historic fabric.
- The route benefits from a wealth of heritage features, including historic tracks, turntables and cobblestones. The team recognise that these features play an integral role in preserving the industrial character of the historic Goods Yard.
- London Road provides an important east-west connection in the scheme, with the proposed double-sided retail street possessing its own distinct character. As such its restoration is fundamental to the success of both the site-wide retail strategy and the masterplan as a whole.



- Main Line
- Suburban Rail Line

Fig 6.3.31: Section identifying Network Rail constraints to be considered



Fig 6.3.32: Assorted Network Rail assets within and around Plot 7

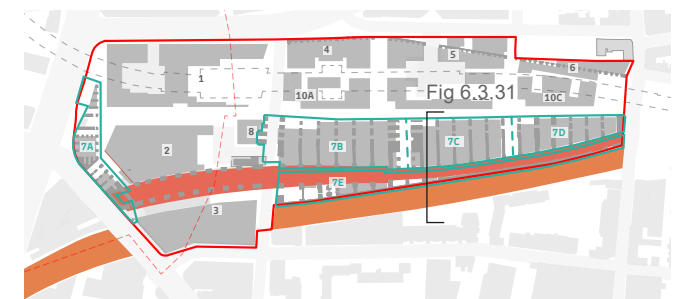


Fig 6.3.33: Key Plan: Railway line



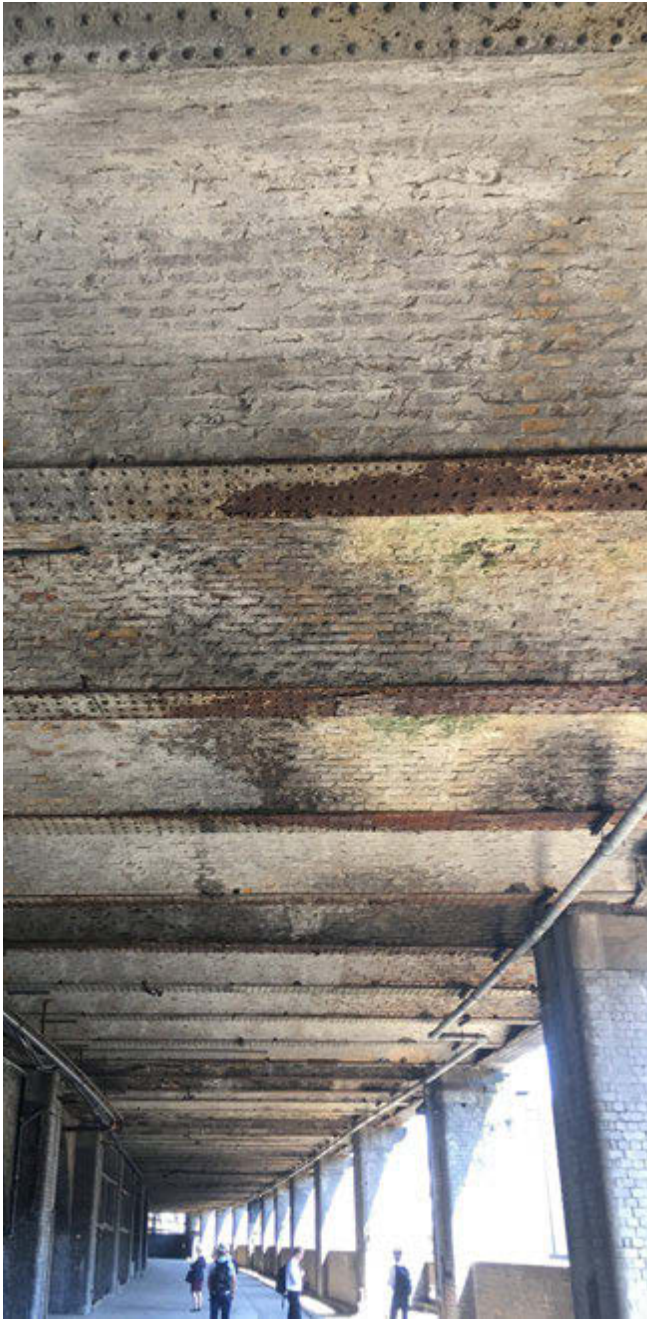


Fig 6.3.34: London Road jack arch lid

### 6.3.21 London Road's Jack Arch Lid

The previous submission considered the pros and cons of retaining the jack arch lid over London Road. This late 19th century enclosure has a subtle curve along its length and is open to the south. There is a structural rhythm and patina that contributes to the unique character of The Goodsyard that convinced the team to retain it. On reviewing the previous submission which sought to create openings and oculi in the lid, it is proposed that the lid remains intact, with no proposed punctures up through the historic fabric.

The lid presents the following constraints and challenges to be considered:

- Poor structural condition of the jack arches, which will require significant repairs to create a safe public environment.
- Rail operator requirements to significantly improve the current separation between London Road and the railway, which sits 5-6m below. This will include erecting a 3m high barrier running the length of London Road at podium park level, with an additional 3m stand-off distance required at podium.
- M+E considerations: With the lid retained, London Road has to be designed as a covered space. This is likely to require the introduction of mechanical ventilation and smoke extraction, sprinklers, smoke detection, fire curtains to the railside edge, fire protection applied to the existing jack arch structure, fire barriers across London Road width, fire alarms, emergency signage, emergency as well as artificial lighting and potentially fire rated shopfronts.
- Acoustic considerations: The retention of the lid will require significant attenuation of London Road surfaces to reduce the reverberation to acceptable levels for a public street.

### 6.3.22 London Road Acoustic Challenges

No specific design standards or guidance are available for external covered streets, but from an acoustic quality perspective it will be desirable to limit rail noise. This will ensure that pedestrians and shoppers are comfortable.

Acoustic modelling will be required to develop strategy and the detailed design.

The following sections on the detailed retail proposals will explain how the proposed rail side retail units along sections of London Road help provide the required buffer to the railway and also to assist with acoustic attenuation. Materials for this edge condition have been chosen with maintenance access in mind.

### 6.3.23 Other Below Ground Constraints

As described in Section 2.7, a British Telecom tunnel runs north-south beneath Braithwaite Street.

Due to the location of the Rail operators Suburban Line Railway beneath London Road (and also the adjacent mainline railway), no surface water or foul drainage may be discharged onto or routed through the railways.

### 6.3.24 Conceptual Approach to Retail

The previous scheme concentrated retail in the Braithwaite Viaduct and its adjoining arches, with London Road acting as the site's primary shopping street (Fig 6.3.36). Whilst this made good re-use of the historic fabric along this route, it failed to celebrate the listed Viaduct; the listed arches were buried deep within the retail units and their elevations were not visible in the urban street.

In comparing the revised scheme with the previous submission (Fig 6.3.35; Fig 6.3.36) it is clear how much additional active frontage is being provided in the revised scheme and how much more of the historic fabric is being revealed for public viewing. This helps to animate the routes, connections and public spaces.



Fig 6.3.35: Revised masterplan: the primary retail street

- |   |   |  |
|---|---|--|
| <span style="color: green;">—</span> Plot 7 Boundary    | <span style="color: blue;">- - -</span> Active retail frontage                                | <span style="background-color: #4682b4; color: white;">A1</span>                   |
| <span style="color: black;">—</span> Plot Boundary      | <span style="color: yellow;">●</span> Squares + open spaces                                   | <span style="background-color: #4682b4; color: white;">*</span> A1 (food business) |
| <span style="color: brown;">- - -</span> Site Boundary  | <span style="background-color: black; color: black;">■</span> Listed historic structure       | <span style="background-color: #4682b4; color: white;">A3</span>                   |
| <span style="color: orange;">→</span> Pedestrian routes | <span style="background-color: #808080; color: black;">■</span> Non-listed historic structure | <span style="background-color: #008080; color: white;">A5</span>                   |

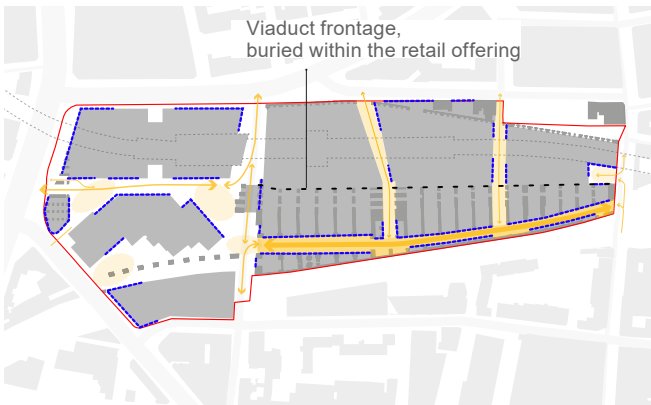
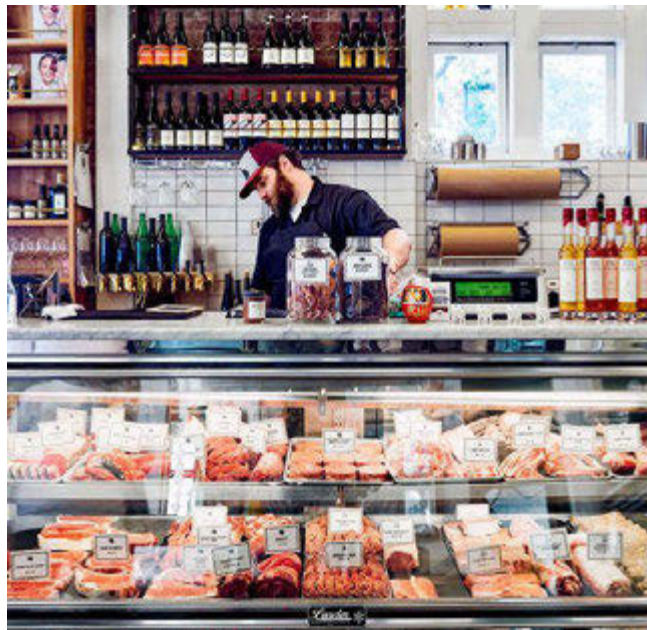


Fig 6.3.36: Previous masterplan proposal



Fig 6.3.37: Examples of imaginative retail reuse of historic viaduct structures





### 6.3.25 Retail and Tenant Mix

This revised scheme submission seeks site-wide flexibility of retail class use. The aspiration is for cafes, food businesses and restaurants to be the primary occupiers along the edges of new public squares, encouraging external spill out. This will provide a dynamic visual tug to visitors and animate these spaces.

It is proposed that the tenant mix is first and foremost for the local communities, then the Londoner, then the tourist. Retail diversity will be actively encouraged and promoted across the site. Shops that cater to the needs of the community might include butcher, baker, general store, grocer and delicatessen. It is envisioned that these could be supplemented by clothing and shoe retailers, bookshops, homeware shops, music stores, bicycle repair hubs and cafes. Overall, there will be an emphasis on independent retailers, drawing inspiration from the vibrant shops and eateries found in the Shoreditch neighbourhood.

Fig 6.3.38: Encouraging and promoting independent retailers, meeting the needs of local communities, Londoners and visitors

### 6.3.26 Strategic Plot Layout

The revised scheme submission seeks consent for the arrangement shown in Fig 6.3.40.

The revised scheme has taken cognisance of considerable pre-application consultation described in previous chapters.

As described on the previous pages – the layout is shaped by the historic structures that the uses are deployed within. It is proposed that the historic Middle Road be reinstated as a vital east-west route to complement London Road. Historic north-south connections, Farthing Lane and Cygnet Lane, will be maintained. Thresholds and junctions will be animated by generous public squares and sheltered dwell spaces, which will help break up the length of the street.

The repurposing of the listed Viaduct (Plots 7B,7C,7D) is controlled to deliver active retail frontages to both Middle Road and London Road. It is proposed that to create two double-sided streets the units within the Viaduct are subdivided. As such it is expected that retail units will require servicing (deliveries and refuse) via their shopfronts.

Animation of London Road's southern edge (Plot 7E) will be provided by the public squares and kiosks. The informal public spaces, clustered around key connections to the wider masterplan and the surrounding area, will provide space for visitors to dwell, with potential for café seating to spill out. These moments will also allow light and fresh air in.

It is proposed that there is only one staircase in Plot 7; this will be located on London Road in the Boiler Room, a non-listed remnant of the site's industrial past. The Commercial Street staircase, as indicated in Fig 6.3.39, straddles Plot 7A and Plot 3, and requires the removal of part of the listed boundary wall. This intervention is covered in further detail in Section 6.3.49 of this report, and in Section 4 of the Heritage Statement (2019).

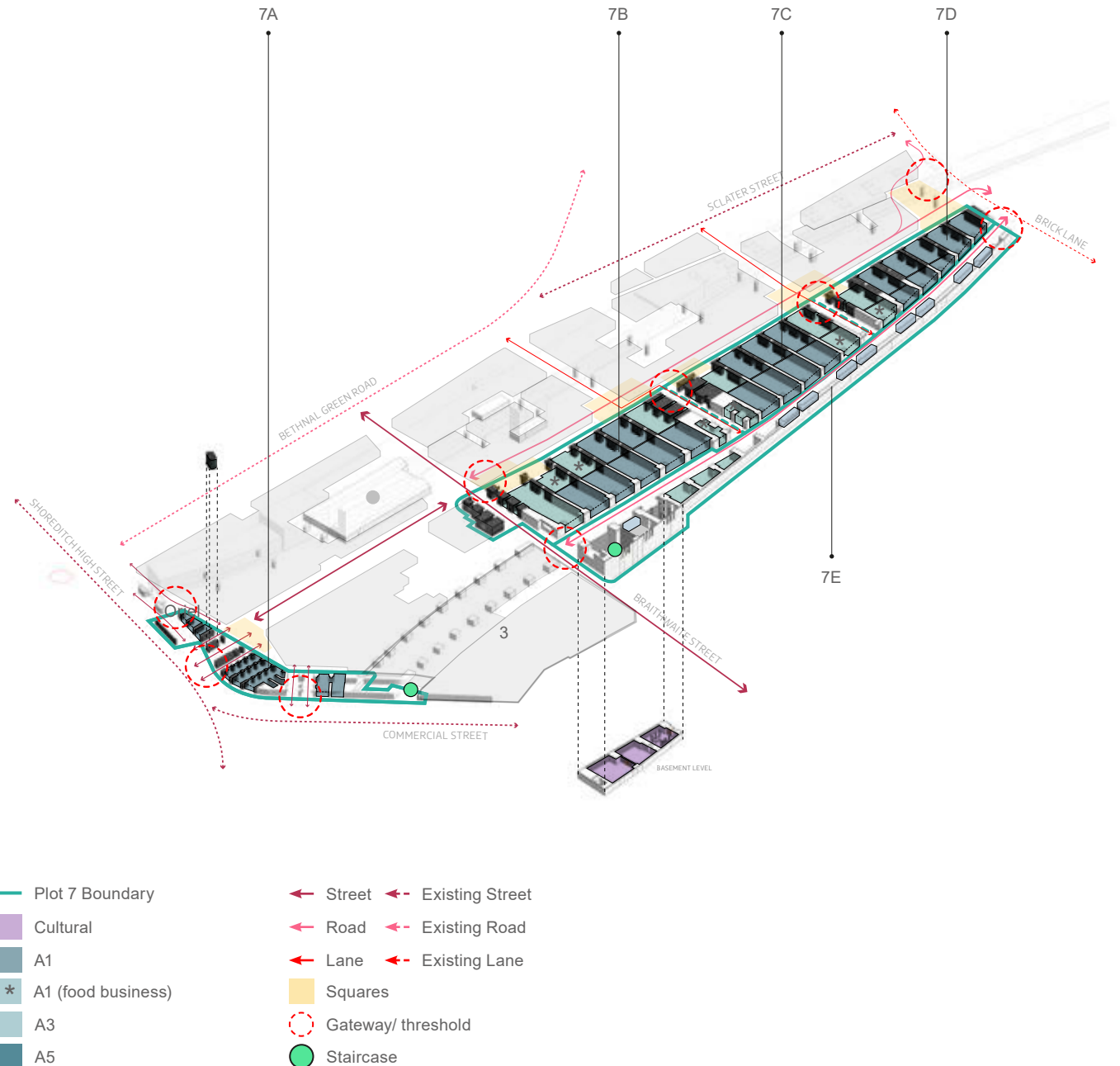
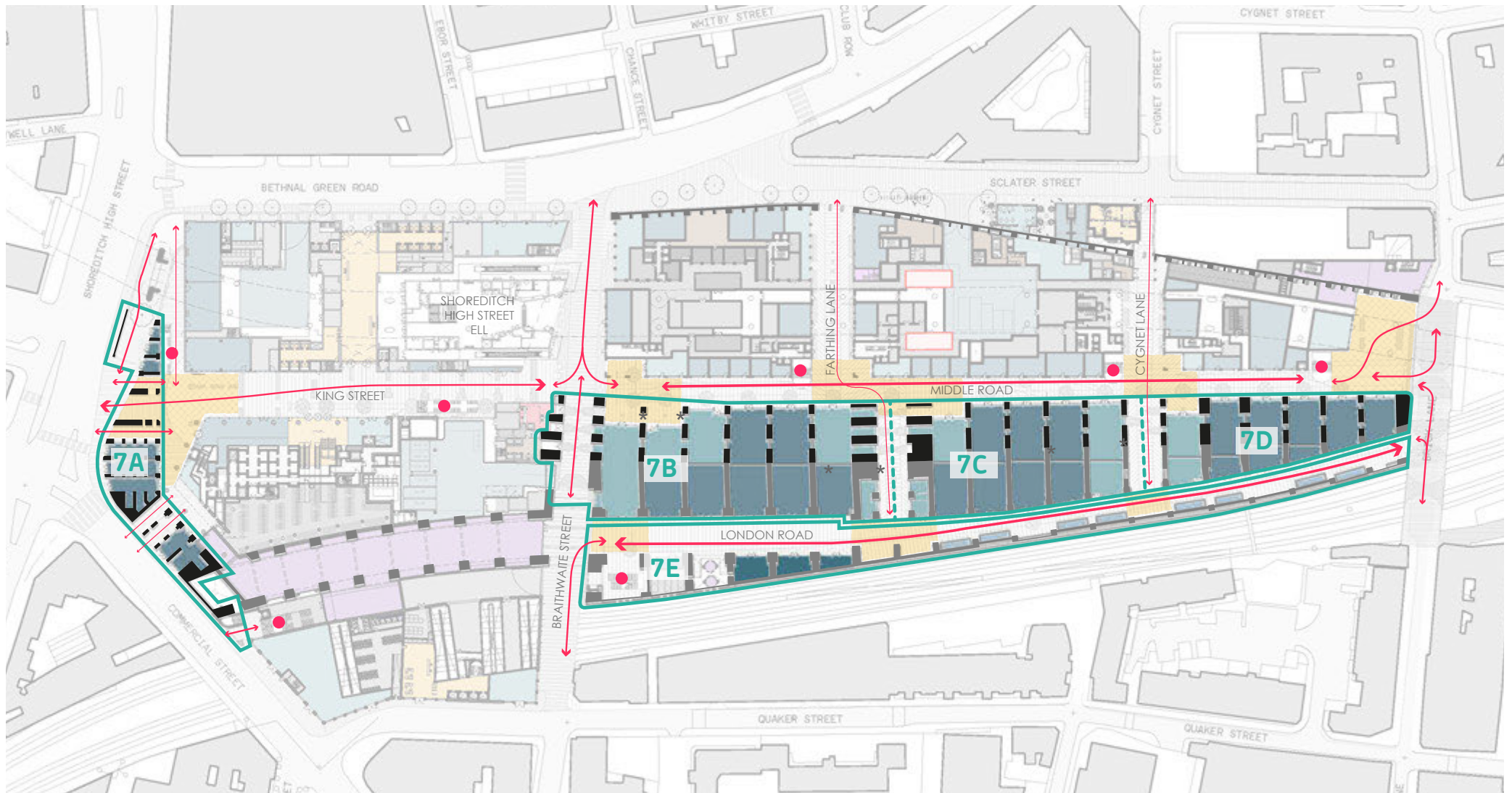


Fig 6.3.39: Strategic layout axo of Plot 7 within the context of the masterplan





- |                                |                    |                         |
|--------------------------------|--------------------|-------------------------|
| Plot 7 Boundary                | A1/A2              | Squares and open spaces |
| Listed historic structure      | A1 (food business) | Staircase               |
| Non-listed historic structure  | A3                 |                         |
| Pedestrian routes through site | A5                 |                         |

Fig 6.3.40: Strategic layout of Plot 7

### 6.3.27 Retail Use Classes

6.3.28 Retail is proposed across Plot 7, with flexibility sought for A1, A2, A3, A5, D1/D2.

Planning use class definitions are as follows:

- A1 - Shops
- A2 - Financial and professional services
- A3 - Restaurants and cafes
- A5 - Hot food takeaways
- D1 - Non-residential institutions
- D2 - Assembly and leisure

It is not proposed that any A4 use class (drinking establishments) will be sought for units in the masterplan.

Throughout this section 'A1 (food business)' is referred to; for clarity this is an A1 unit whereby takeaway sales of drinks, cold and re-heated food is the dominant use, with a limited amount of seating.

Cultural use (D1/D2) is proposed for the Boiler Rooms on London Road, with the intention to house a site-wide educational facility in this location. This will provide visitors with the opportunity to explore the site's industrial heritage, with special focus on the historic hydraulic accumulator that still exists in this location.

### 6.3.29 Quantum of Retail

The maximum gross external areas (GEA) for Plot 7 is summarised in Table 6.3.1 and Table 6.3.2. The proposal splits the plots between detailed (7 a-d) and outline (7e) information, the area schedules therefore reflect this split. For more information see the Design Guide (Chapter 4.10) that accompanies this application.

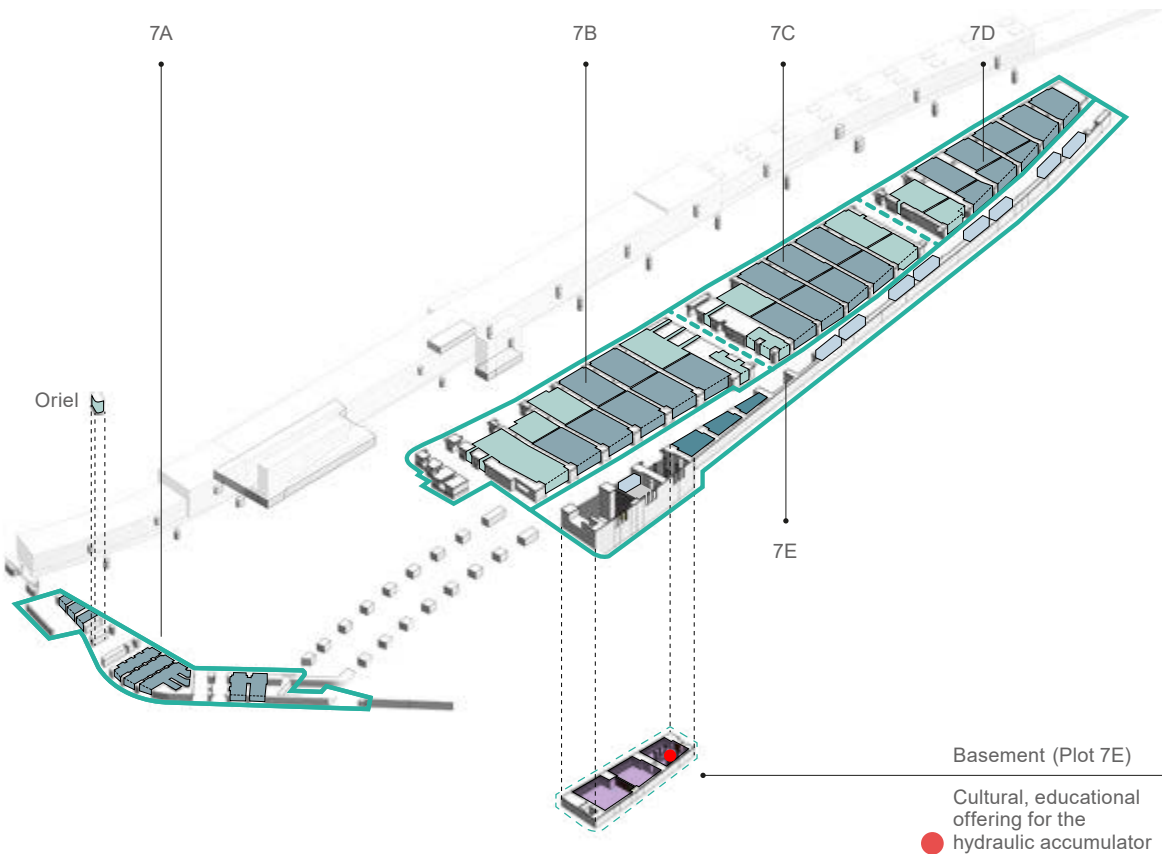


Fig 6.3.41: Plot 7 exploded axonometric

	A1, A2, A3 & A5 Retail GEA m <sup>2</sup>	D1/D2 Use GEA m <sup>2</sup>	Sui-Generis GEA m <sup>2</sup>	Total GEA m <sup>2</sup>
<b>Total</b>	<b>5,494</b>	<b>0</b>	<b>0</b>	<b>5494</b>

Table 6.3.1: Plot 7 a-d detailed design area summary

	A1, A2, A3 & A5 Retail GEA m <sup>2</sup>	D1/D2 Use GEA m <sup>2</sup>	Sui-Generis GEA m <sup>2</sup>	Total GEA m <sup>2</sup>
<b>Total</b>	<b>384</b>	<b>390</b>	<b>99</b>	<b>873</b>

Table 6.3.2: Plot 7e illustrative design area summary (maximum)



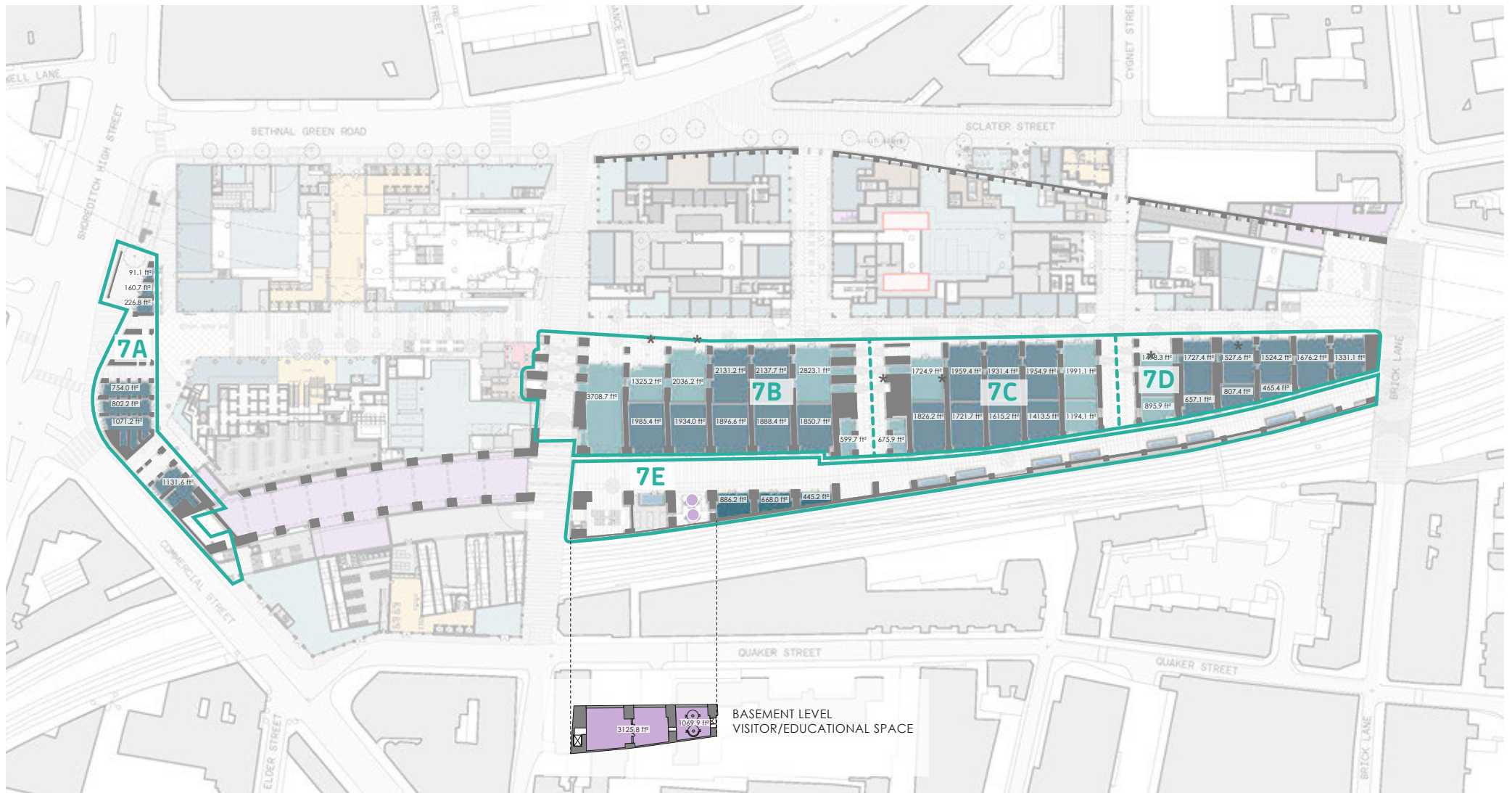


Fig 6.3.42: Plot 7 gross internal areas (in square footage)

### 6.3.30 Heritage Constraints

Specific locations have been identified for the placement of A3 units due to heritage constraints relating to mechanical and electrical (M+E) servicing within the listed Viaduct (discussed in Section 6.3.78 of this report, and Section 4 of the Heritage Statement (2019). These locations have also been specified with the intention that their use will contribute to the animation of new public squares, thresholds and north-south connections.

### 6.3.31 Rail Operator Constraints

Specific locations to the south of London Road have been identified for the placement of kiosks; these are to act as a barrier to the railway track.

### 6.3.32 Approach to Structural Interventions

The site-wide restoration and reuse of the existing historic fabric has been promoted throughout the process of developing the revised scheme.

This has been well-received by consultees, in particular LBTH and LBH, the GLA, English Heritage, and the Joint Design Review Panels of LBTH and LBH, as well as during the public consultation process and by the Mayor's Design Advisory Group.

Further detail can be found in the Heritage Statement (2019) and Extent of Demolition Drawings (LBC drawings A-05\_10-010; 011; 012), and landscape and public realm proposals in Section 4.0 of this report.

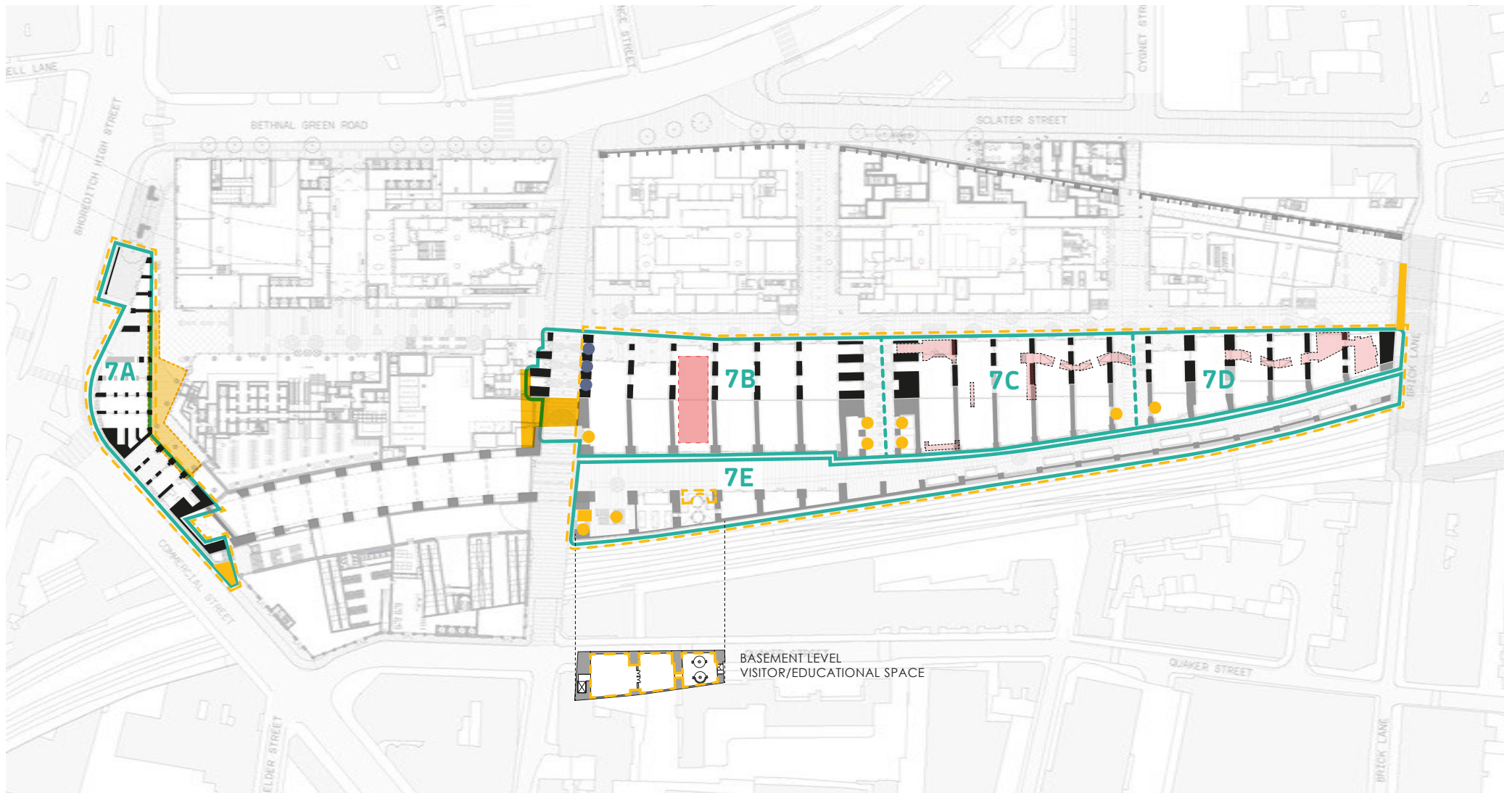
### 6.3.33 Proposed structural interventions

The plan opposite shows the structural interventions proposed across all parts of Plot 7. The largest will be the laying of new floor slabs to ensure all retail units can be accessed from the street without the need for steps or ramps. Further interventions include:

- **Plot 7A:**
- The introduction of a new 'lid' structure, spanning between the masonry walls of the Oriel Gateway and Plot 2. This is proposed to create a connection along the platform level and park, maximising green public space on the site
- The removal of a small area of listed historic wall on Commercial Street to allow for the introduction of a new staircase
- **Plots 7B, 7C, 7D:**
- The re-opening of existing historic cross-arches in the Viaduct
- A small number of new vertical and horizontal openings proposed at specific locations. These are proposed to bring more light into the proposed retail units and support the servicing strategy. In Plot 7B, vertical openings will provide access up to the Platform Park. None of these openings are proposed in the listed Braithwaite Viaduct; all openings are proposed to the non-listed adjoining structures
- The removal of part of the barrel vault spanning Braithwaite Street to allow for service access into the Plot 2 service yard
- **Plot 7E**
- Vertical openings up through the non-listed structures to allow vertical access to the Platform Park.

All of these interventions, shown in Fig 6.3.43, are covered in further detail over the following pages.





- |  |  |   |
|--|--|---|
| <span style="color: teal;">—</span> Plot 7 Boundaries                                      | <span style="color: red;">●</span> Intervention - reopen existing arch   | <span style="color: red;">■</span> Swimming Pool - to be filled in  |
| <span style="background-color: black; color: black;">■</span> Listed historic structure    | <span style="color: orange;">●</span> Intervention - create new opening  | <span style="border: 1px dashed black; background-color: pink;">■</span> Surviving platform and ramp structures |
| <span style="background-color: gray; color: black;">■</span> Non-listed historic structure | <span style="background-color: yellow;">■</span> Intervention - removal of historic fabric                                   |   |
| <span style="border: 1px dashed orange;">—</span> Floor slab intervention                  | <span style="background-color: yellow; border: 1px dashed orange;">■</span> Oriel Gateway - Plot 2 platform lid intervention |   |

Fig 6.3.43: Proposed structural interventions in Plot 7

### 6.3.34 Floor Slab

Levels vary widely across the site, particularly within the arches of Plots 7C and 7D where historically there were platforms for unloading stock.

It is proposed that new ground floor slabs be laid: one across Plot 7A, another for 7B,C,D,E, extending into the arches, to ensure the new commercial ground floor space is fully accessible to all. This will take the form of new concrete ground-bearing slabs within the arches to create level access off the surrounding streets. This is indicated in Fig 6.3.47.

Given the poor condition of London Road (Plot 7E), it is proposed that reconstruction, including any structural repairs and new waterproofing, be finished with the relaying of existing granite setts, turntables and tracks to acceptable line and level. This reuse and incorporation of existing historic materials and features is proposed across all parts of Plot 7. Further information can be found in Section 4 of the Heritage Statement (2019).



Fig 6.3.44: Existing level changes in listed arches



Fig 6.3.46: Existing turntables on London Road

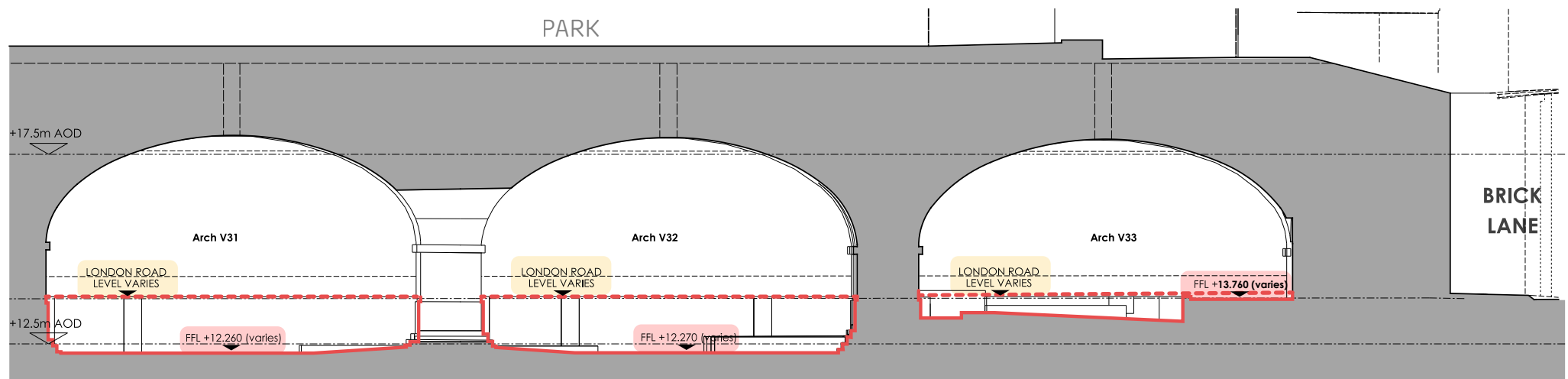
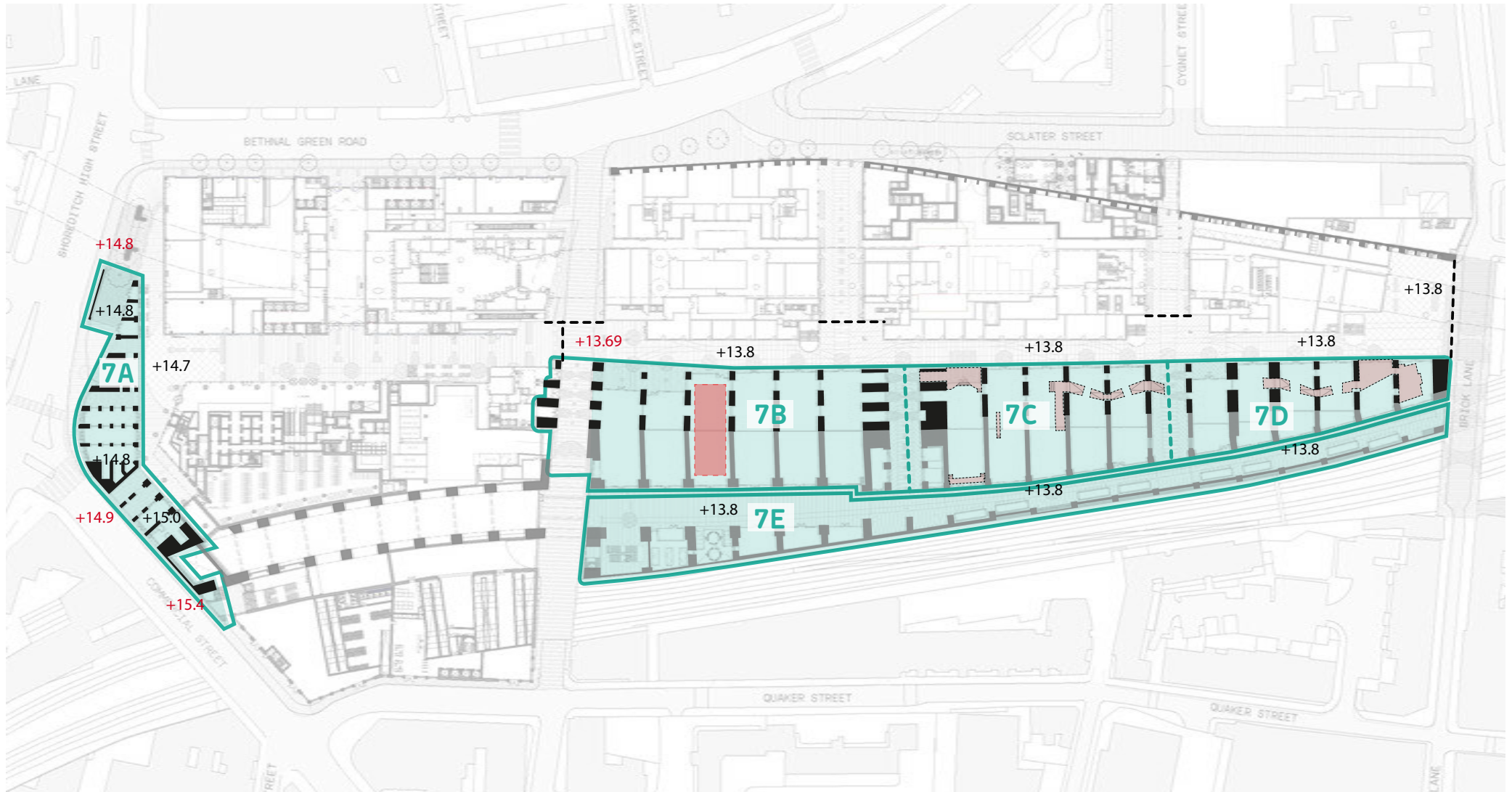


Fig 6.3.45: Indicative section through Plot 7 showing the existing varying levels within the arches and the proposed new floor slab

— Existing varying floor level

- - - Proposed new floor slab





- |                               |                               |  |
|-------------------------------|-------------------------------|--|
| Plot 7 Boundary               | +Xm Existing floor levels     | Swimming Pool - to be filled in        |
| Proposed Floor slab           | +Xm Proposed new floor levels | Surviving platform and ramp structures |
| Listed historic structure     | Edge of proposed slab         |  |
| Non-listed historic structure |                               |  |

Fig 6.3.47: Proposed new floor slab

### 6.3.35 Platform slab (Level 01)

The surviving arches of the Braithwaite Viaduct and Oriel Gateway have the potential to carry substantial loads provided that these are appropriately distributed. This principle has been reflected in the location, layout and massing of Plot 8, which sits at Platform Level, above the Braithwaite Viaduct (Plots 7B,C,D). Further information on Plot 8 can be found in Section 5.8.

The current assessment is they can carry a four to five storey building of lightweight construction subject to detailed intrusive testing of mortar and brick strengths etc. and placing foundations over the Viaduct supports. Fig 6.3.52 indicates a typical section through the Braithwaite Viaduct and Plot 8. The structural design principles have been assessed based on the historic site usage as illustrated in the historic photographs below (Fig 6.3.49; Fig 6.3.50) and structural design loadings, estimated historic platform levels. The Heritage Statement (2019) discusses the original, 70ft high iron and glass warehouse that originally occupied the upper level.

— Plot 7 Boundary, located below at ground level

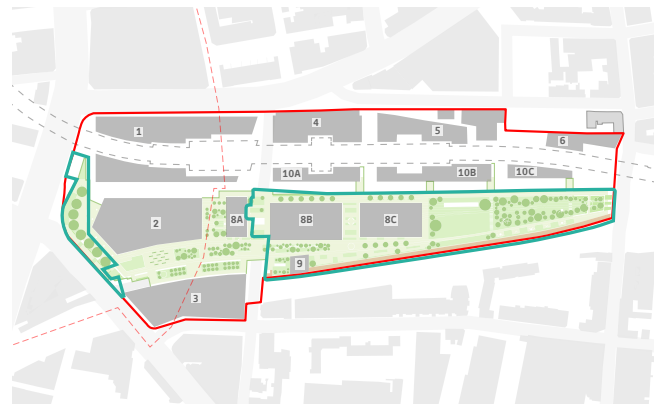


Fig 6.3.51: Key Plan: Platform Park level

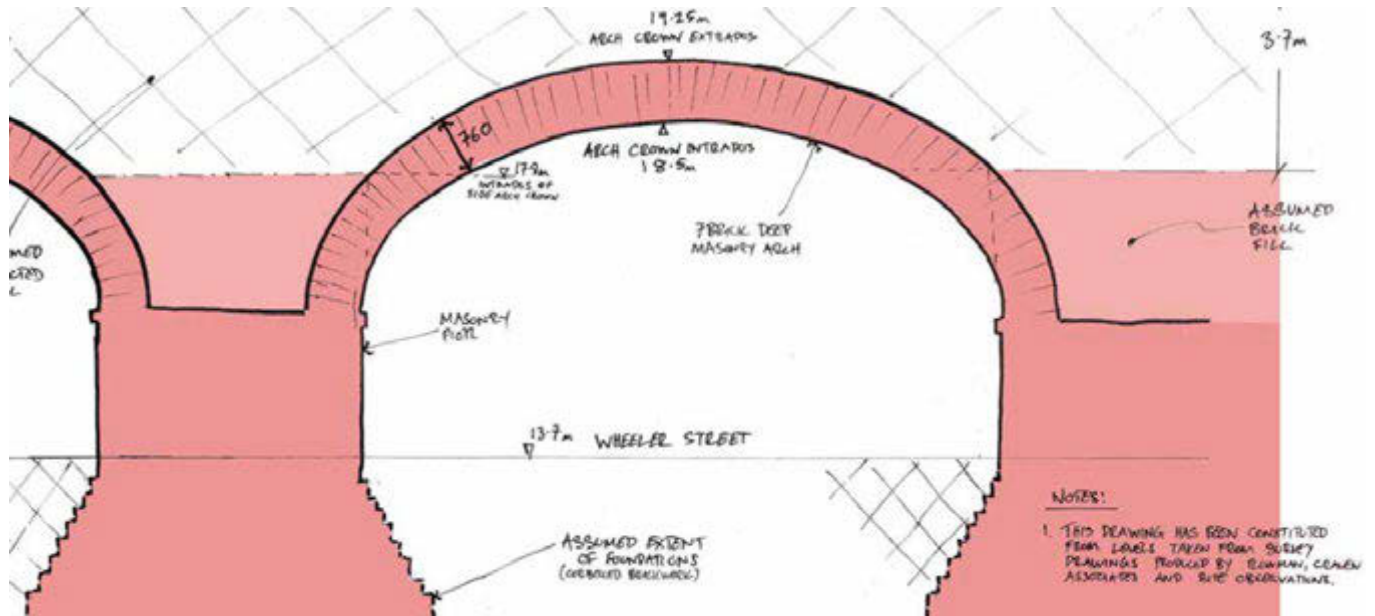


Fig 6.3.48: Typical section through the Braithwaite Viaduct over Braithwaite Street (formerly Wheeler Street)

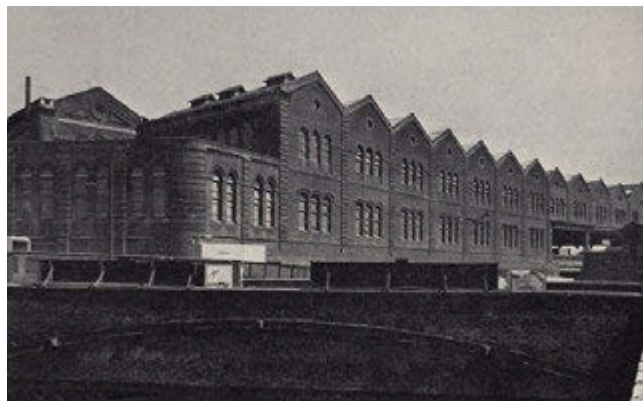


Fig 6.3.49: The historic pitched roof shed structure, the Goods Yard



Fig 6.3.50: Aerial view of the historic pitched roof shed structure



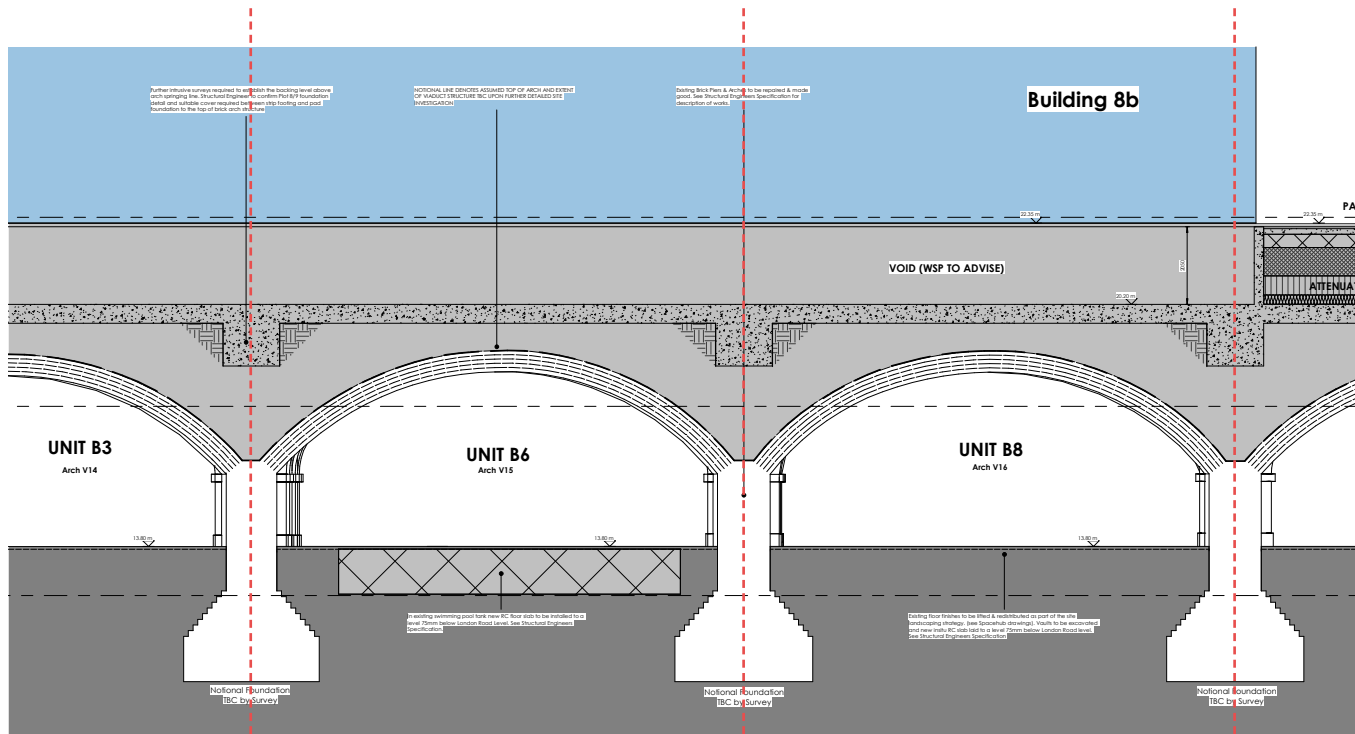


Fig 6.3.52: Section showing how non-load bearing ground floor slabs span between the foundations

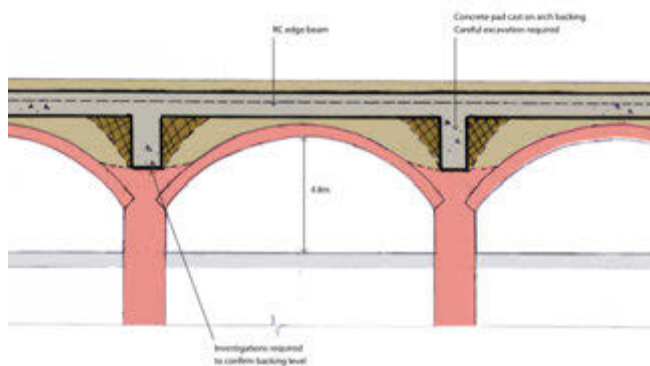


Fig 6.3.53: Sketch section through the proposed podium floor slab

The structural methodology for supporting buildings (with Plot 8 the most significant) off existing Viaduct structures is to provide concrete pad or strip footing foundations which are positioned over the arch / viaduct buttress supports.

Suspended (non-load bearing) ground floor slabs then span between the foundations from where vertical columns spring.

Further investigations are required to confirm the backing level of the buttress / arch support.

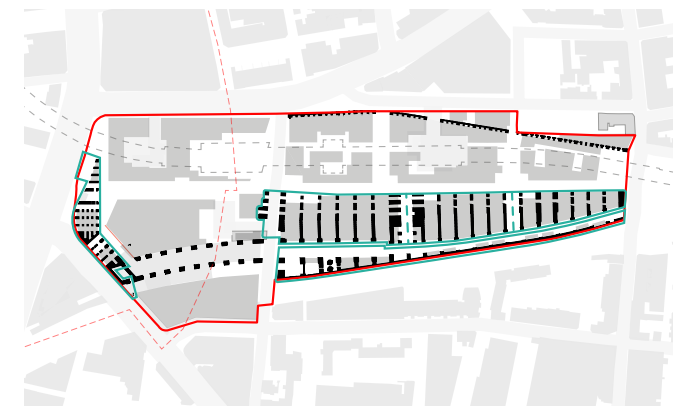


Fig 6.3.54: Key Plan: Ground level - the Braithwaite Viaduct

### 6.3.36 Jack Arch Lid

Spanning across and above London Road and the Suburban Line Tunnels (SLT) are a series of steel and brick jack arches. These are at London Road level and at Platform Park level.

As discussed previously, the condition of these existing structures is poor, as shown in the images opposite. Following a recent inspection (conducted by WSP, 2019) evidence was found that the steel, identified in earlier condition reports as requiring attention, has continued to deteriorate owing to weathering and water penetration. In addition, substantial building and general material, as well as significant overgrowth of shrubbery and trees were observed on the upper deck, which are surcharging the jack arch structure. Further information can be found in the WSP Visual Inspection Report 2019.



Fig 6.3.56: Poor condition steel work, jack arches (clockwise from above)



Fig 6.3.55: London Road jack arches, as existing



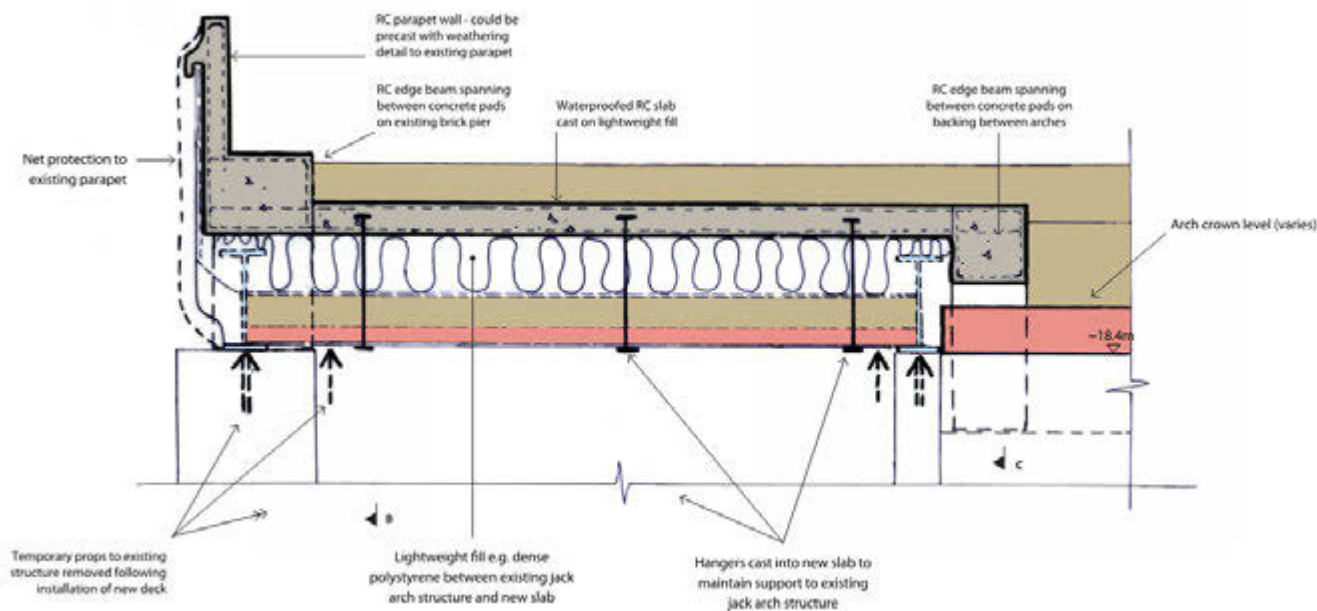


Fig 6.3.59: Cross-section through proposed jack arch over decking

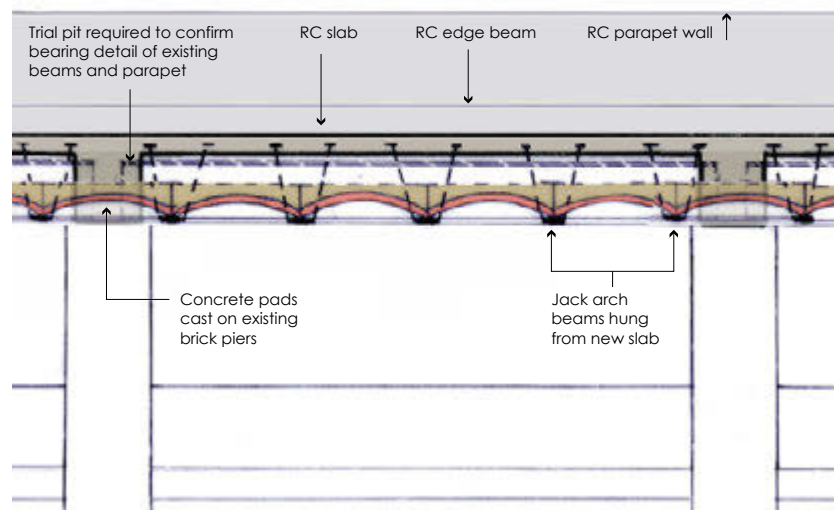


Fig 6.3.60: Longitudinal section through proposed jack arch over decking

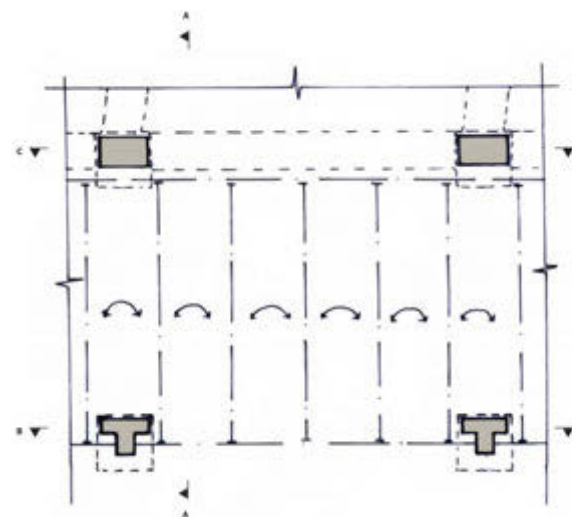


Fig 6.3.57: [Left] Sketch showing existing jack arch deck with proposed new support locations for new deck

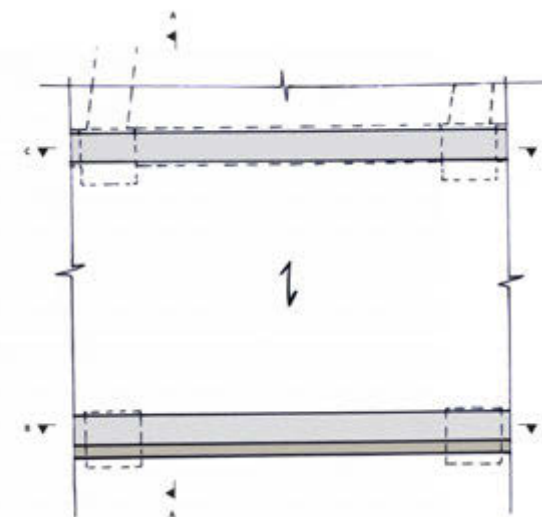


Fig 6.3.58: [Right] Proposed over decking arrangement

Following suggestions from the Alan Baxter report, it is proposed the existing steel beams remain in place and are hung from a new reinforced concrete structure installed above, supported off the existing masonry piers. The proposed over decking arrangement is indicated in the sketches opposite, as taken from the Alan Baxter 2009 report. It is also proposed that the fill material and overgrowth is removed as soon as possible.

It is proposed that given the continued corrosion of the steel, that the proposed solution described is reviewed on commencing the re-development works.

### 6.3.37 New shopfront openings in the historic Viaduct

On Braithwaite Street, Farthing Lane and Cygnet Lane a small number of new openings and re-openings are proposed. As highlighted in, all new openings are located within non-listed masonry only across Plots 7B, C,D and E. There are no new openings proposed to the Oriel Gateway (Plot 7A).

Proposed structural interventions of this nature are intended to express the new engineering in a robust and honest way using large picture frames of exposed self-compacting concrete. All new shopfront openings will puncture through non-listed piers of the viaduct as steel structures clad in concrete construction. Further detail is provided in the Structural Engineers drawings.

The following pages explore each structural intervention. Further information can be found in the Heritage Statement; Appendix C: Structural Interventions to Listed Structures (2019), and Extent of Demolition Drawings (LBC drawings A-05\_10-010; 011; 012).

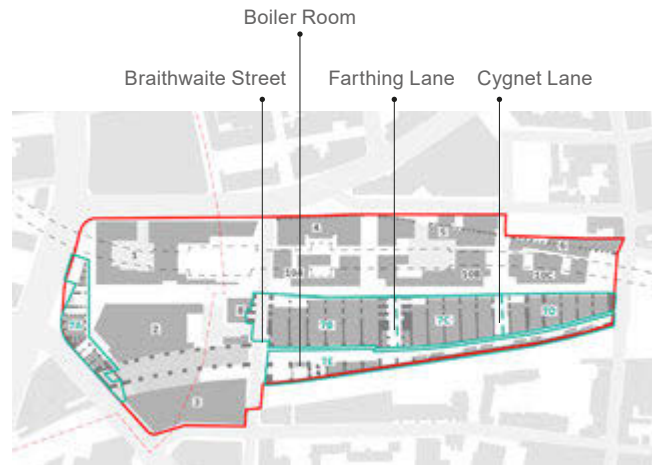


Fig 6.3.61: Key Plan

Proposed horizontal opening in the existing structure

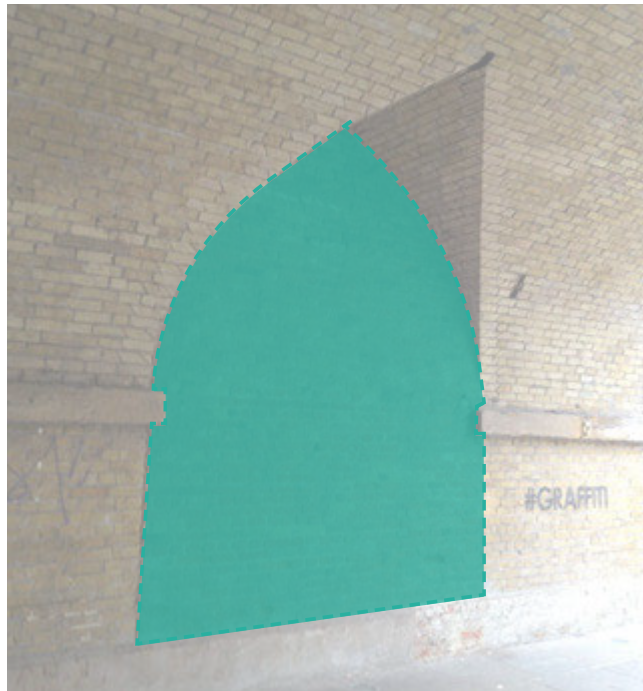


Fig 6.3.62: Proposed re-opening of cross arch, Braithwaite Street

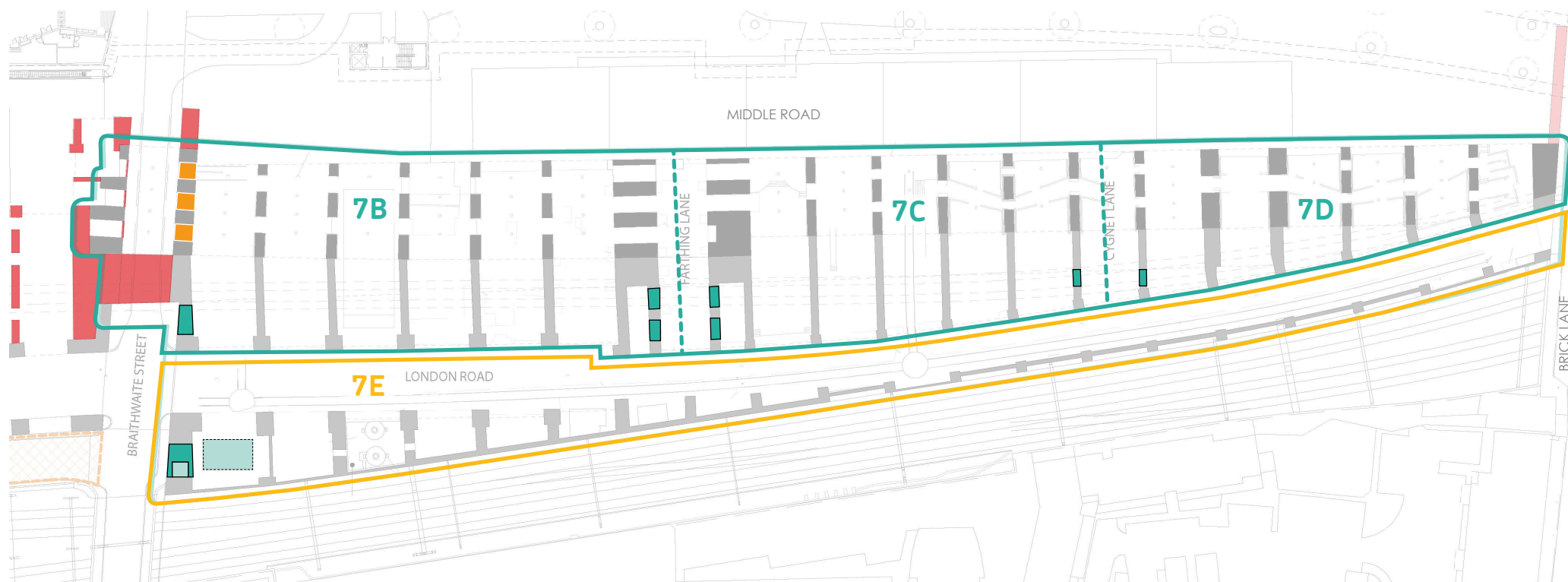


Fig 6.3.63: Proposed new opening: Farthing Lane



Fig 6.3.64: Proposed new opening: Braithwaite Street for the Boiler Room





- Plot 7 Boundary - Detailed Application
- Plot 7 Boundary - Outline Application
- Retained listed structures
- Retained non-listed structures
- Existing structure to be removed
- New horizontal openings through existing brick piers
- New vertical openings through existing brick piers
- Reopen existing arches, currently bricked up

Fig 6.3.65: Proposed new openings

### 6.3.38 Braithwaite Street Openings

There are two proposed new openings on Braithwaite Street –

- One horizontal opening in Plot 7B, in the non-listed adjoining arch that supports the barrel vault spanning Braithwaite Street.
- One horizontal opening in Plot 7E, in the western façade of the non-listed Boiler Room. Beyond this opening there are two proposed vertical openings in the Boiler Room itself for the Boiler Room lift and staircase.

It is proposed that three cross arches are re-opened, as shown in Fig 6.3.66.

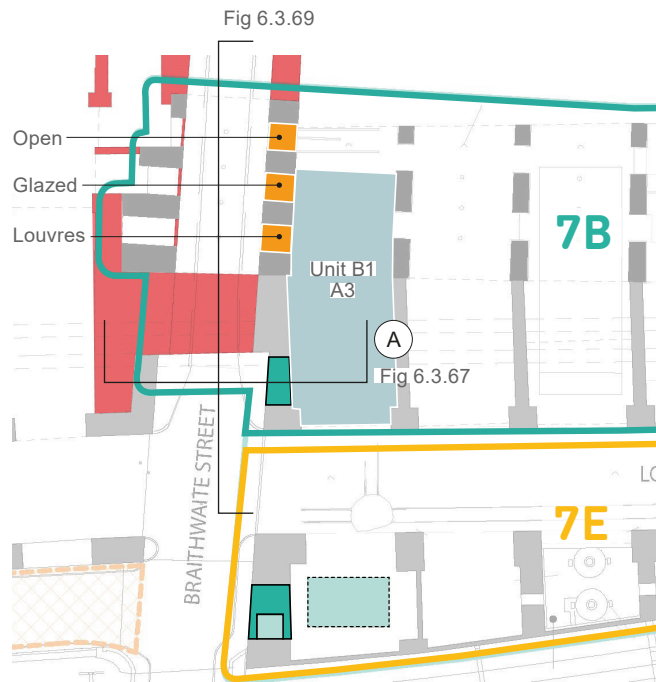


Fig 6.3.66: Braithwaite Street - proposed new openings

### 6.3.39 Braithwaite Street Opening A (Plot 7B)

The horizontal opening to the non-listed arch is proposed for two reasons – firstly, it helps to complete the composition of openings along this frontage and animate this side of what is currently a dark tunnel thoroughfare. Secondly, the new opening is required for servicing for the proposed A3 use class in the adjacent arch (Unit B1 as indicated below).

This servicing requirement is explored in further detail in Section 6.3.64, and is discussed in Section 4 of the Heritage Statement (2019).

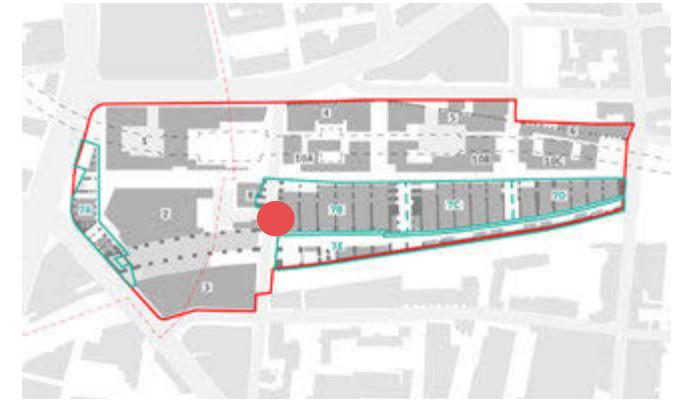


Fig 6.3.68: Key Plan

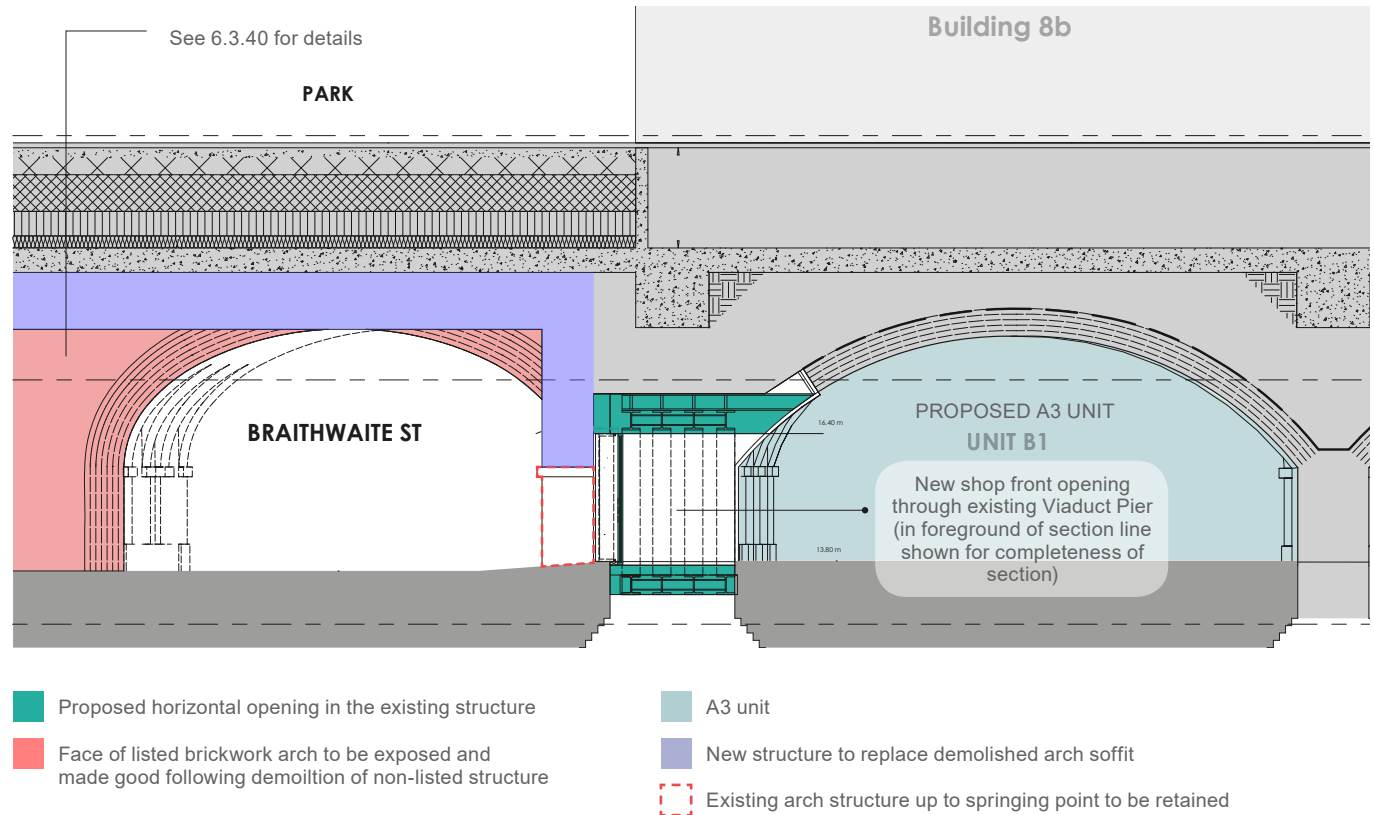


Fig 6.3.67: Proposed new opening - section





Fig 6.3.70: Proposed new opening - Braithwaite Street elevation

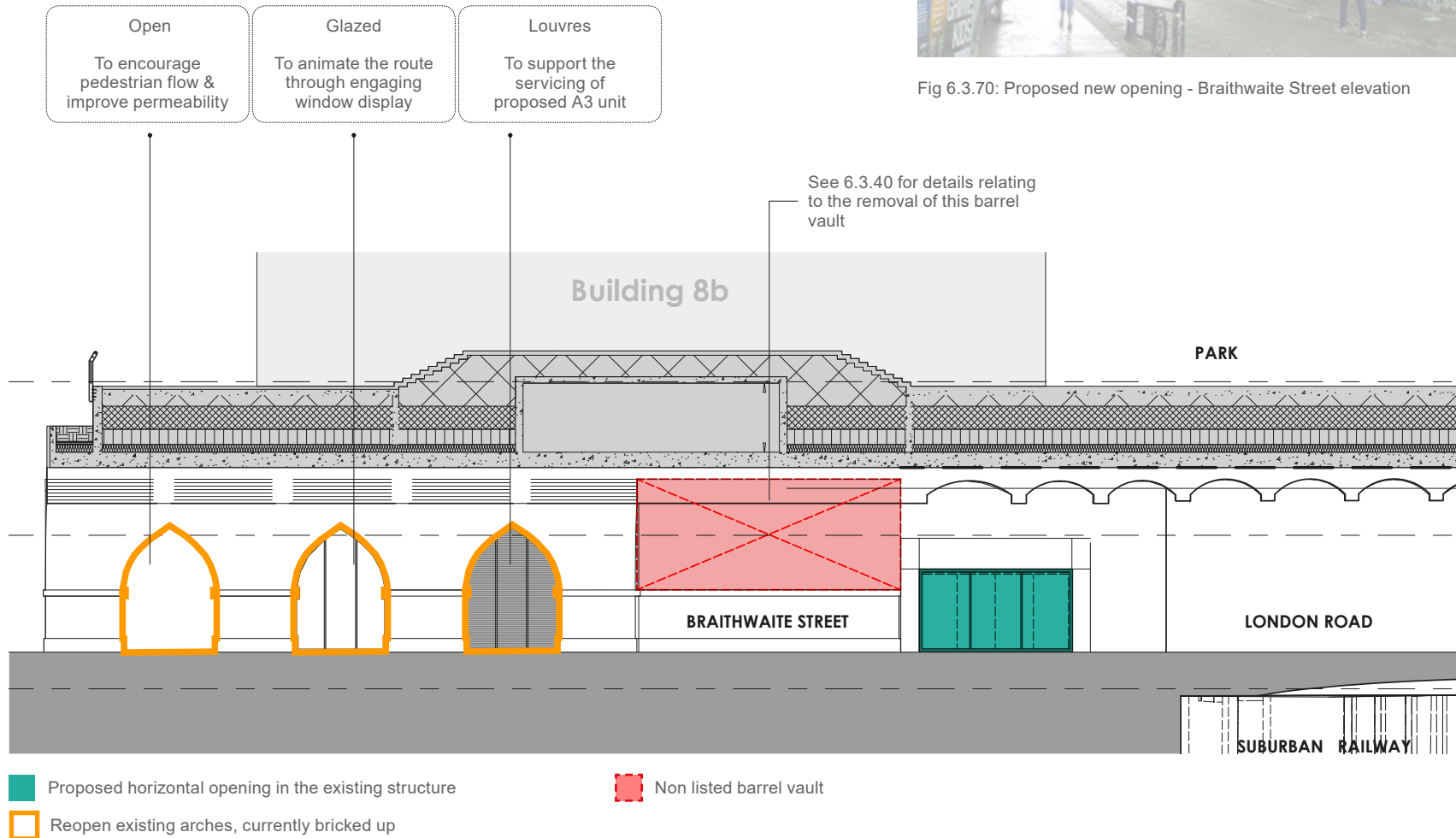


Fig 6.3.69: Proposed new opening - Braithwaite Street elevation

### 6.3.40 Removal of the non-listed Braithwaite Street barrel vault (Plot 7B)

To facilitate the current servicing strategy for Plot 2 (further information please refer to Section 6.2), the removal of the non-listed barrel vault spanning Braithwaite Street is required. This is to provide access into the service yard proposed to the west of Braithwaite Street, in Plot 2, and the extents of this removal is shown in Fig 6.3.72 below.

- Plot 7 Boundary
- ← New opening for loading bay access vehicles
- Grade II listed arches retained
- Non listed arches to be removed
- A3

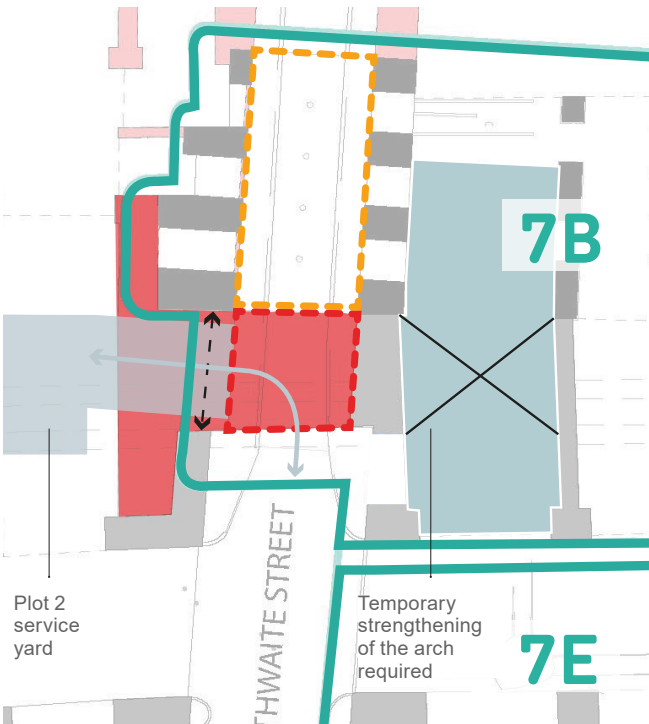


Fig 6.3.72: Plan showing proposed demolition along Braithwaite Street

### 6.3.41 Supporting the remaining bridging structure

It is proposed that a new reinforced concrete wall is constructed to support the remaining bridging structure spanning across Braithwaite Street. This will be required adjacent to the retained arch east of Braithwaite Street as shown in Fig 6.3.72.

It is proposed that a series of steel beams spanning between the proposed reinforced concrete wall to a new supporting structure within Plot 2 form a new bridging structure. To help integrate this structure within the existing historic fabric, arched concrete infills between the beams could be adopted to replicate the jack arches.

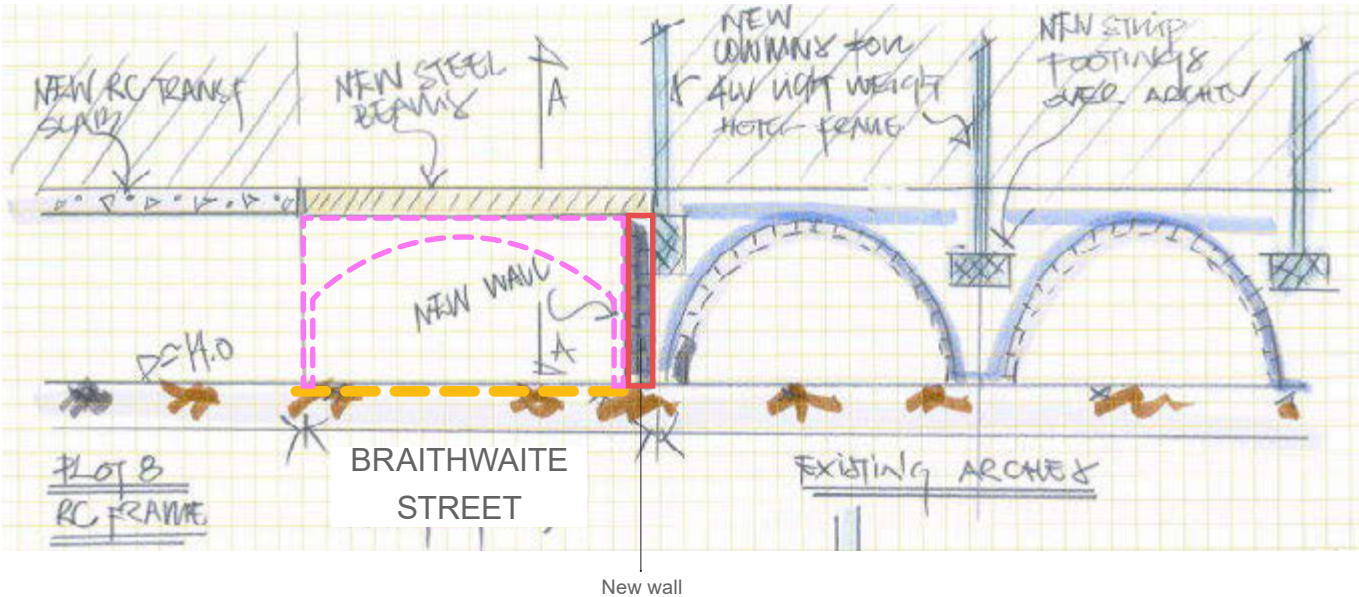


Fig 6.3.71: Sketch section of proposed new bridging structure



Fig 6.3.73: The barrel vault, Braithwaite Street

□ Proposed removal of barrel vault



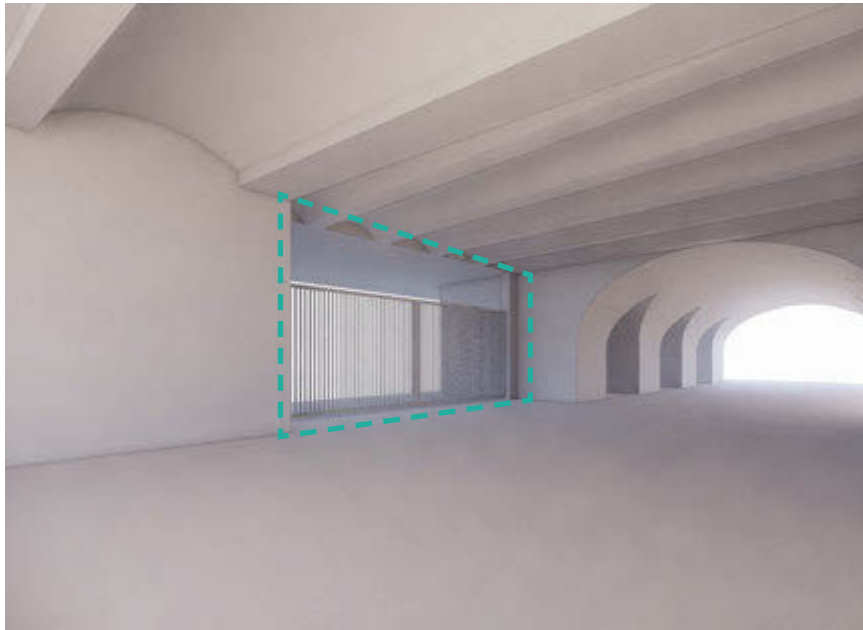



Fig 6.3.74: Illustrative view of proposed new opening into the Plot 2 service yard

 Proposed horizontal opening in the existing structure

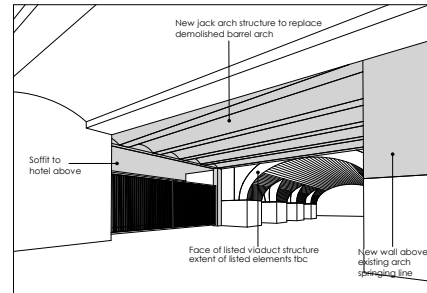
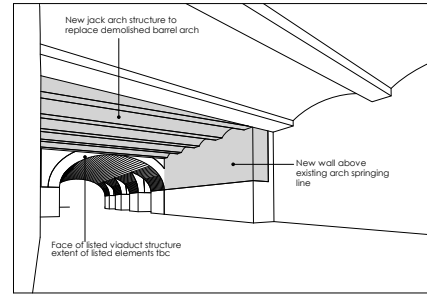


Fig 6.3.75: Illustrative view of proposed new opening into the Plot 2 service yard

### 6.3.42 Temporary support

It is proposed that before the non-listed barrel-vault arch is removed that a temporary braced frame is constructed. This would be located in the last arch east of Braithwaite Street.

This temporary structure is required to resist any horizontal thrust which will likely occur on the removal of the jack arch. The design of the new structure will restrain the arch, allowing the removal of the props once the new bridging structure is in place.

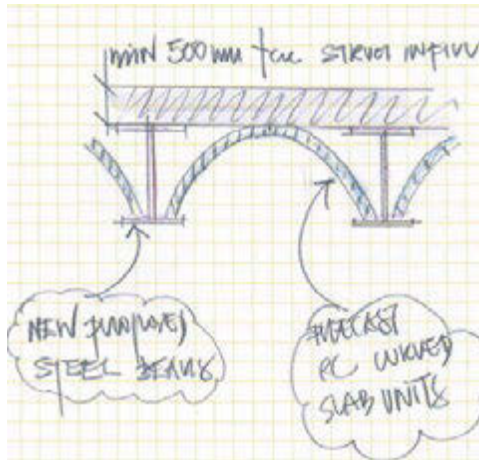


Fig 6.3.76: Sketch detail of new steel beams

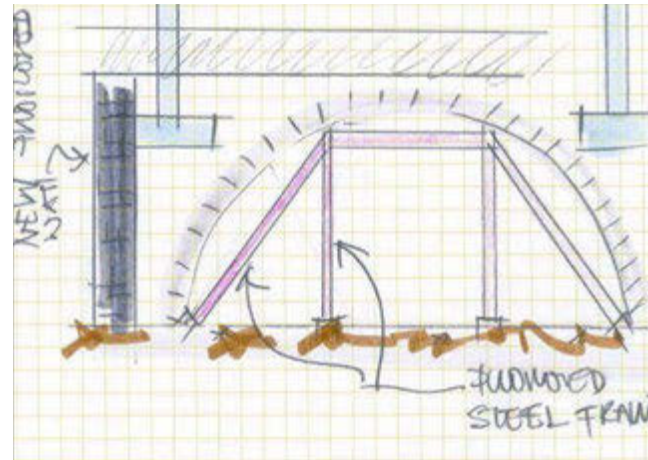


Fig 6.3.77: Sketch of proposed temporary support in adjacent arch

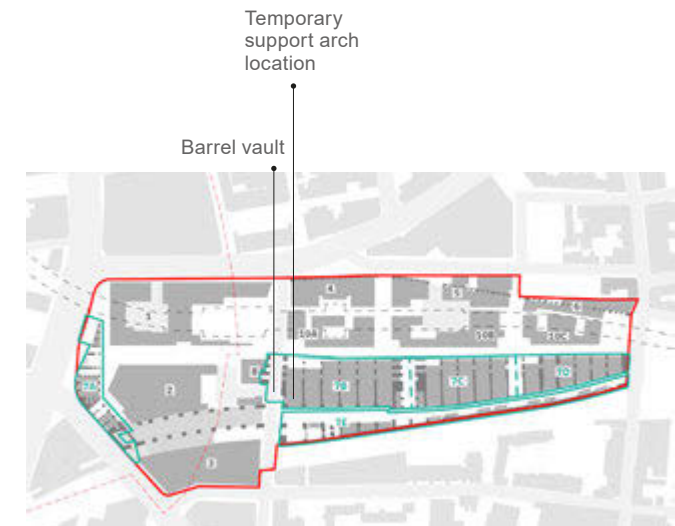


Fig 6.3.78: Key Plan

6.3.43 Braithwaite Street Opening B (Plot 7E)

The proposed horizontal opening creates a link through to the new proposed Boiler Room staircase and up onto the elevated park in Plot 7E. This opening also includes a new lift, above which a new feature chimney will be constructed, to mirror the historic chimney that originally stood in this location. Further detail on the Boiler Room staircase and lift is provided in Section 4.4, Public Realm.

- Plot 7 Boundary - Outline Application
- New horizontal openings through existing brick piers
- New vertical openings through existing brick piers

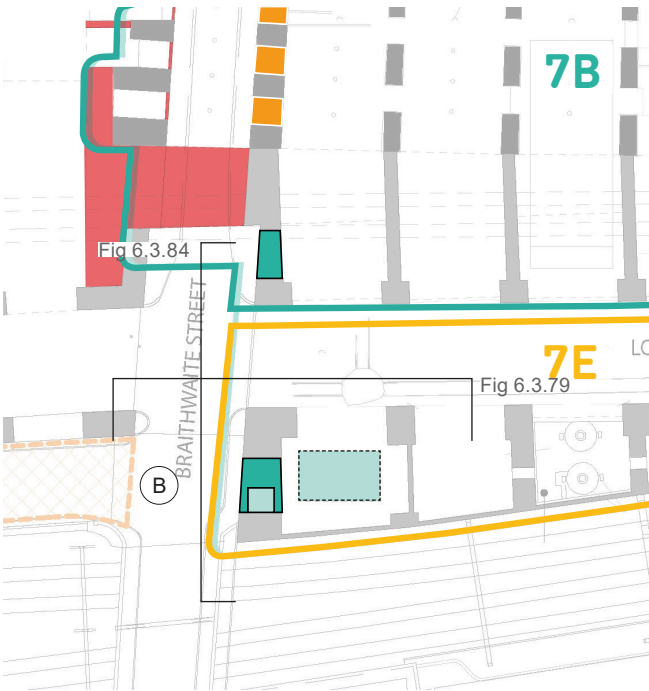


Fig 6.3.80: Braithwaite Street - proposed new openings



Fig 6.3.82: Historic aerial of Boiler Room chimney

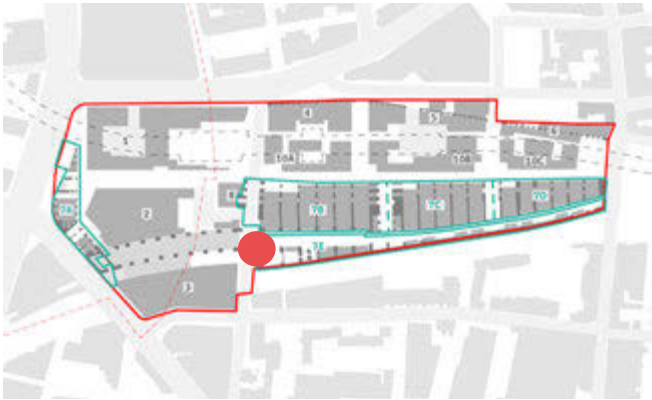
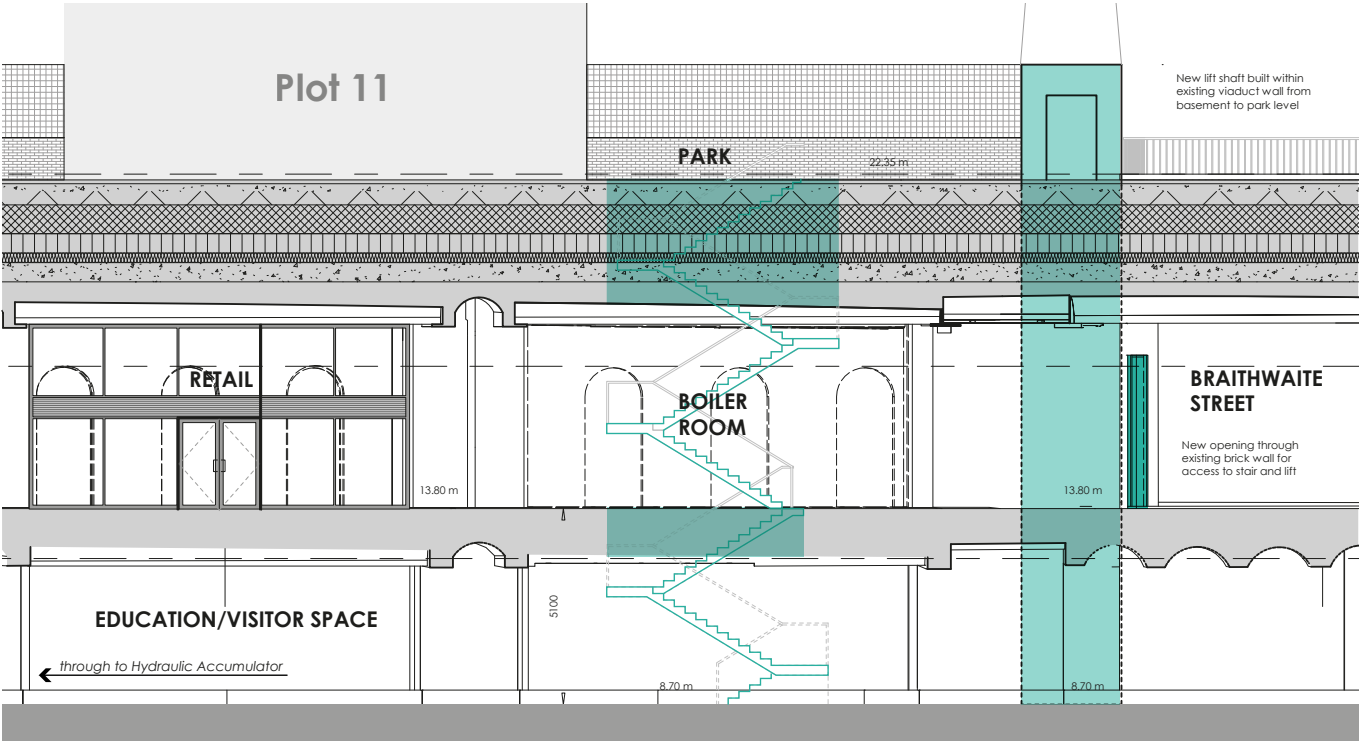


Fig 6.3.81: Key Plan



- Proposed horizontal opening in the existing structure
- Proposed vertical opening in the existing structure

Fig 6.3.79: Proposed new opening - Boiler Room



- ← Lift access up to the park
- Proposed vertical opening in the existing structure
- Proposed horizontal opening in the existing structure

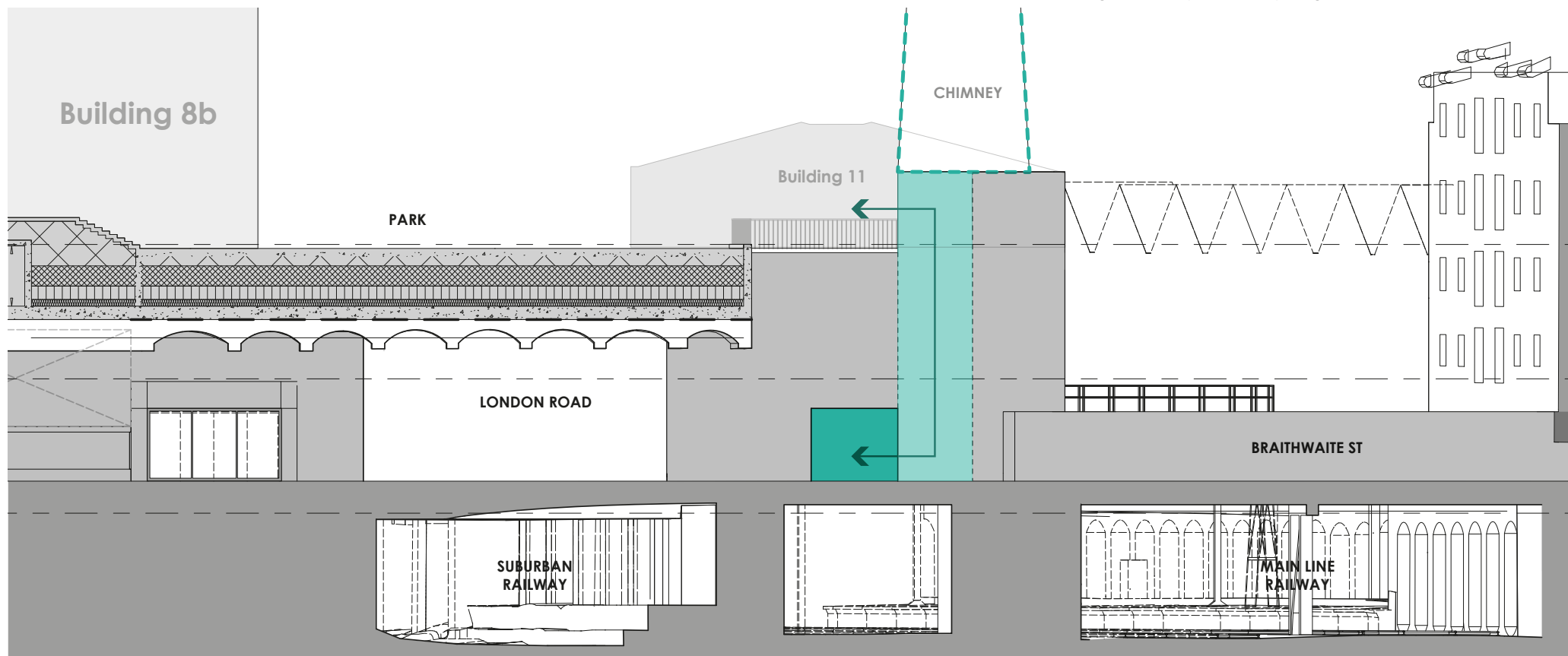


Fig 6.3.84: Proposed new opening - Braithwaite Street elevation



Fig 6.3.83: Proposed new opening - Braithwaite Street elevation

#### 6.3.44 Farthing Lane Openings (Plots 7B, 7C)

The two London Road arches either side of Farthing Lane, Arches V18 and V21, sit within different parts of Plot 7; Plot 7B and 7C, and differ from the majority of the London Road arches.

The arches are deep and narrow, contained within the wide brick piers flanking Farthing Lane. These arches have distinctive brickwork, with contrasting dark brick soldier coursing ( ). These arches have no openings except for the arch front, and are currently dark.

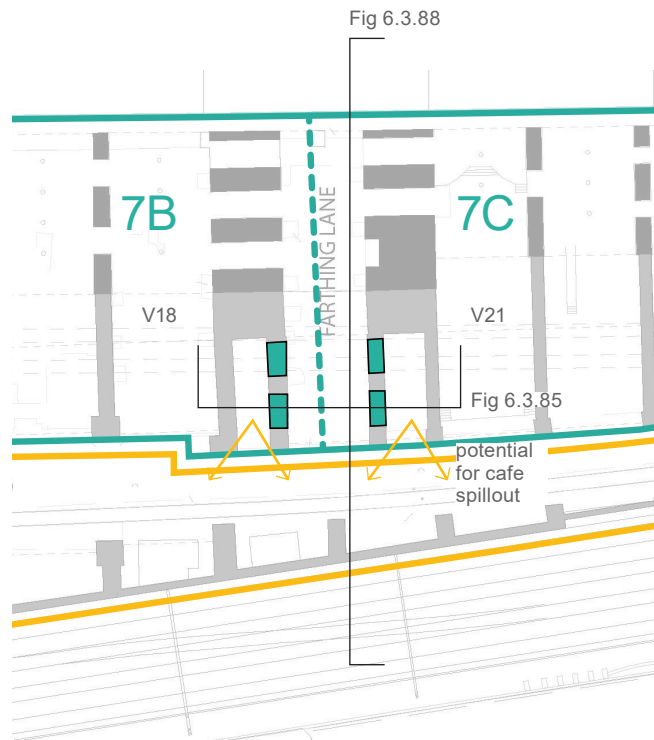


Fig 6.3.87: Farthing Lane- proposed new openings

Two new openings per arch are proposed along Farthing Lane, bringing natural light into these spaces proposed as ideal locations for A1 (food business) units.

As shown in one of these openings is proposed for louvres. This is to ensure that these narrow shopfronts tie into the elevation of London Road and share the same architectural language. This is explored further in section 6.3.74.

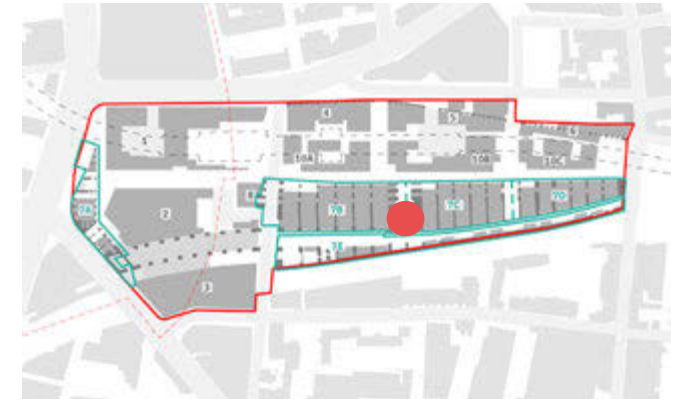


Fig 6.3.86: Key Plan

Note: Unlike other A1 and A1 (food business) shopfronts across Plot 7, these narrow arches do not provide enough space (i.e. the required distance between intake and extract) to incorporate servicing within the shopfront. Therefore, it is proposed that louvres are provided within the new openings.

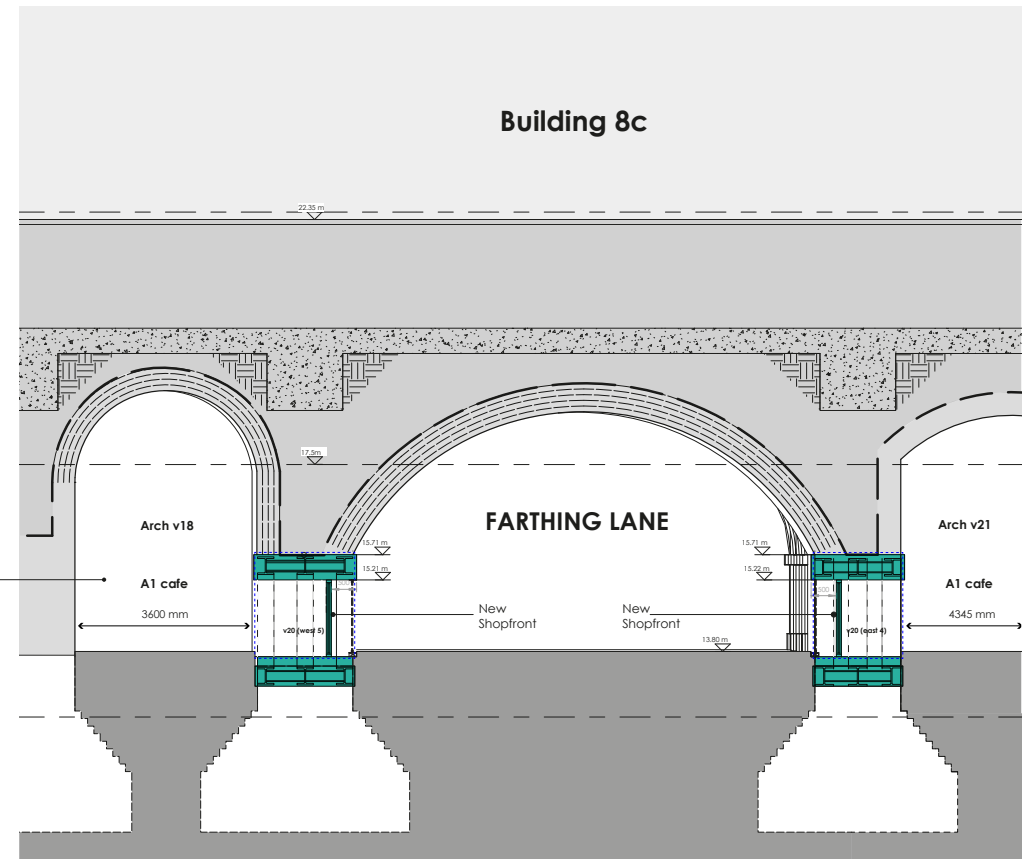


Fig 6.3.85: Proposed new opening - Farthing Lane

Proposed horizontal opening in the existing structure



- Open  
To encourage pedestrian flow & improve permeability
- Louvres  
To support the servicing of proposed A3 unit



Fig 6.3.89: Deep, dark and narrow arches (left, Arch V18; right Arch V21)

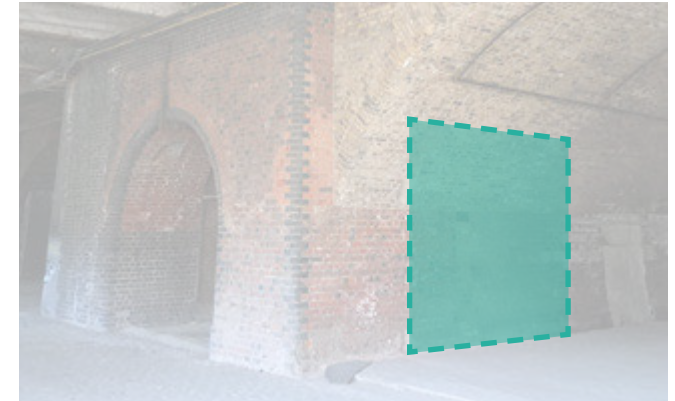


Fig 6.3.90: Proposed new opening for Arch V18 - Farthing Lane

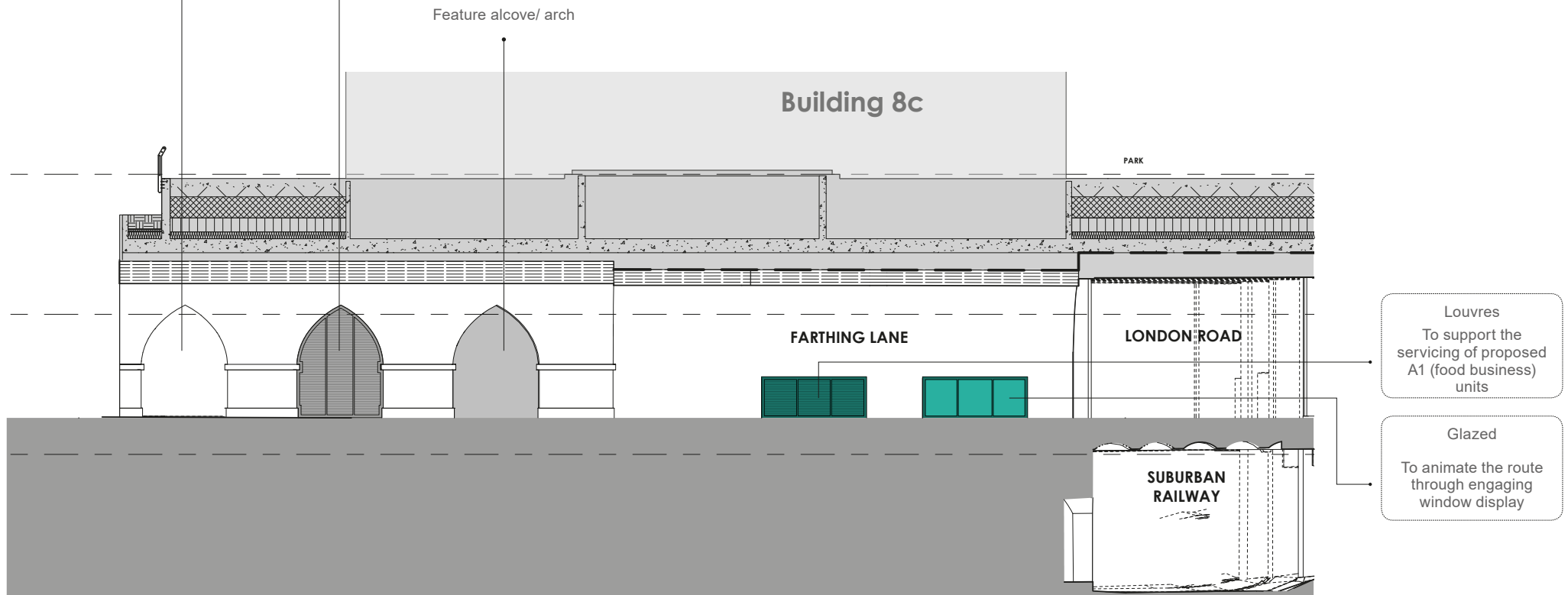


Fig 6.3.88: Proposed new openings - Farthing Lane elevation

■ Proposed horizontal opening in the existing structure

6.3.45 Cygnet Lane Openings (Plots 7C, 7D)

These two horizontal openings, like those of Farthing Lane, are located in different parts of Plot 7, in Plot 7B and 7D. They are proposed to help animate this end of Cygnet Lane. The two arches, V26 and V28, will be subdivided (as indicated), with the London Road units as A1 (food business) use. Here there is potential for seating spill out into the generous public space on London Road.

Unlike the Farthing Lane openings, it is not proposed that the Cygnet Lane openings be given over to louvres. This is due to the arches flanking Cygnet Lane being broad enough to provide the required servicing distances (intake/extract) within the shopfront.

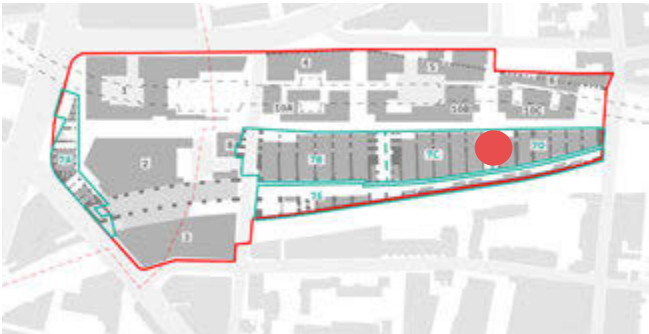


Fig 6.3.93: Key Plan

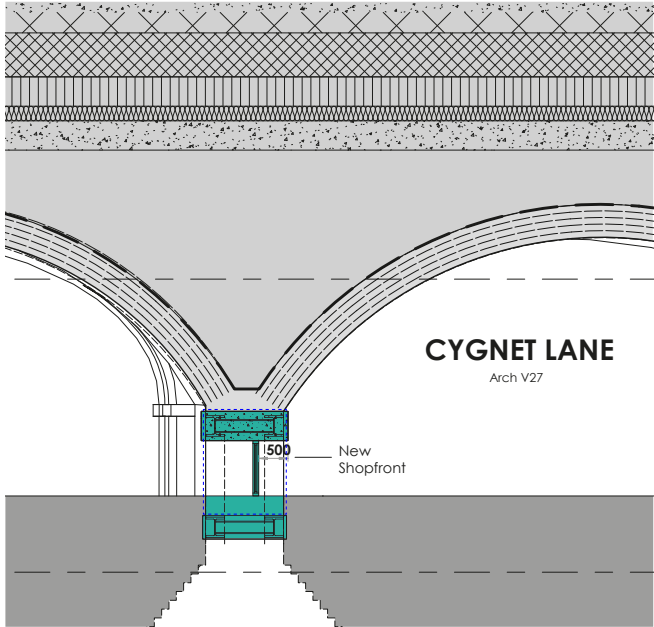


Fig 6.3.91: Proposed new opening - Cygnet Lane

Proposed horizontal opening in the existing structure

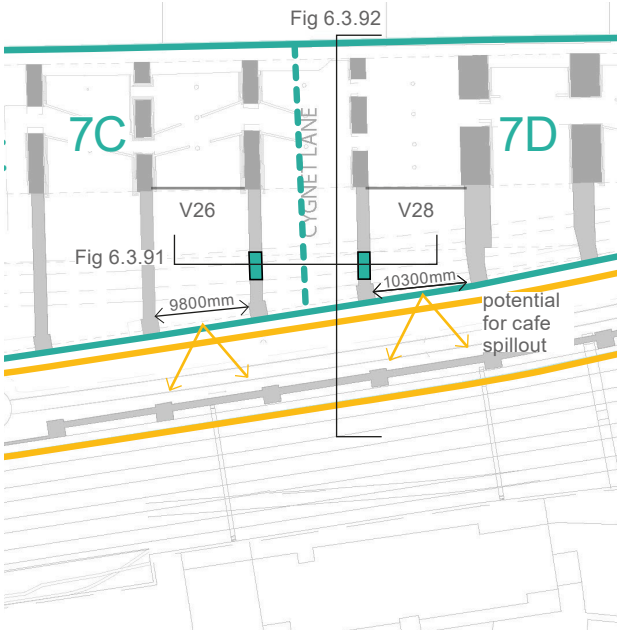


Fig 6.3.94: Cygnet Lane- proposed new openings

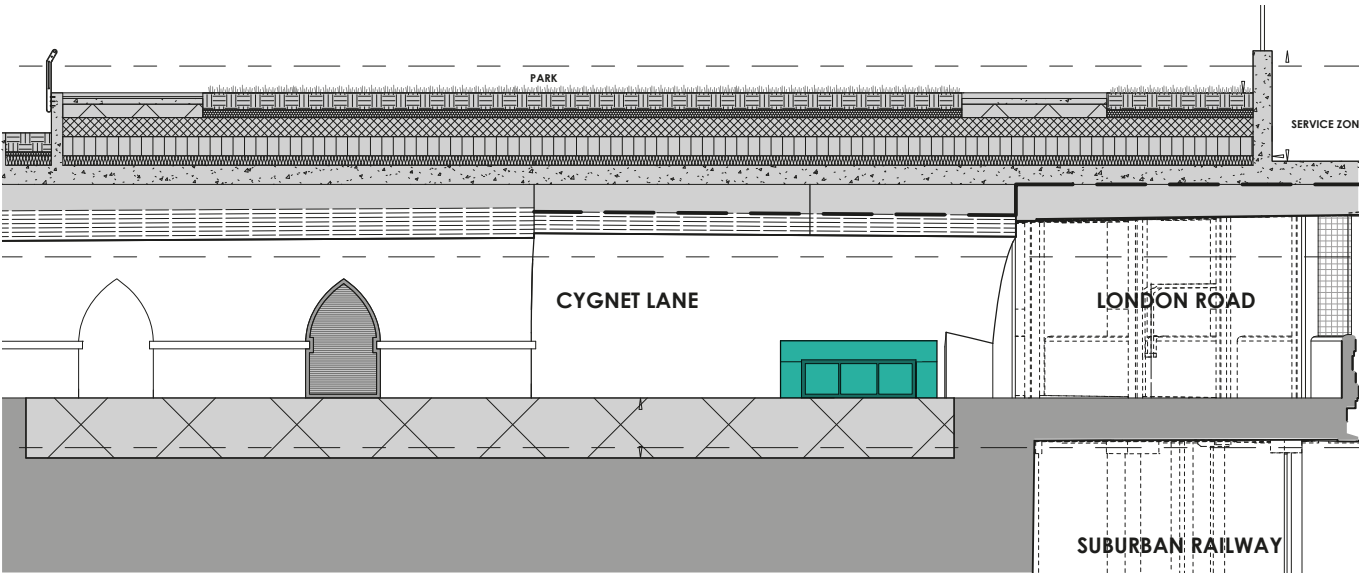


Fig 6.3.92: Proposed new opening - Cygnet Lane elevation

Proposed horizontal opening in the existing structure





Fig 6.3.95: Illustrative view of new King Square



Fig 6.3.97: Brick Lane, showing existing wall

#### 6.3.46 Brick Lane: Opening the square

The revised scheme retains all the existing arches of the Braithwaite Viaduct and the majority of the surviving fragments of the perimeter wall. The site boundary wall on Brick Lane currently acts as a barrier. Following review of the previous proposal, it was considered by the team that opening up the site onto Brick Lane is a positive move, benefiting the site and its surroundings by:

- Improving the permeability between site and surroundings through the creation of a generous threshold and new public realm at street level
- Creating a visual connection down Middle Road towards the Oriel Gateway
- Clarity in wayfinding and ease of access up to the elevated public park
- Creating a safer environment and providing passive surveillance, preventing crime and anti-social behaviour.

The stretch of wall along Brick Lane proposed for demolition is indicated below. Though technically outside the boundary of Plot 7D, the stretch of wall proposed for demolition fixes to the listed Braithwaite Viaduct at the eastern edge of 7D.

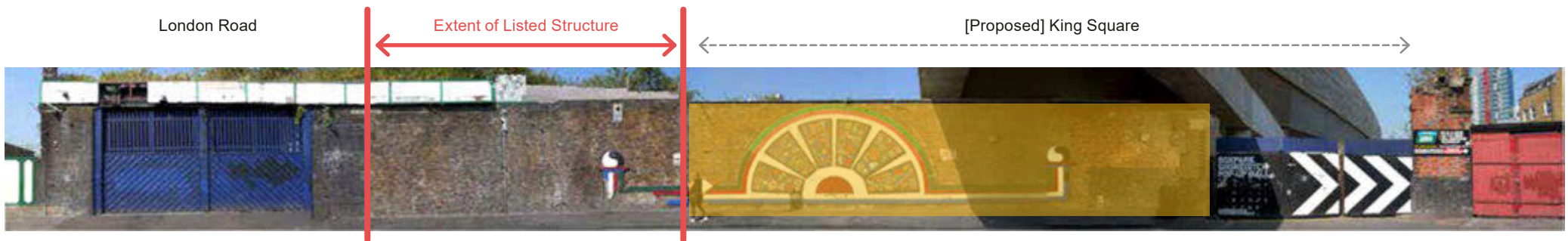


Fig 6.3.96: Existing Brick Lane street elevation, highlighting extent of Listed structure to be retained and the wall to be demolished (yellow)

Following consultation with LBTH and LBH, the GLA, Historic England, the Joint Design Review Panels of LBTH and LBH, it was decided that the previously proposed staircase, located within the final eastern arch of the Braithwaite Viaduct, should be relocated north of the central retail street to become part of Plot 10. This relocation will remove the potential harm such an intervention would pose to the historic fabric, whilst bringing this arch back into use as a desirable retail unit. Further detail is provided in the Heritage statement.

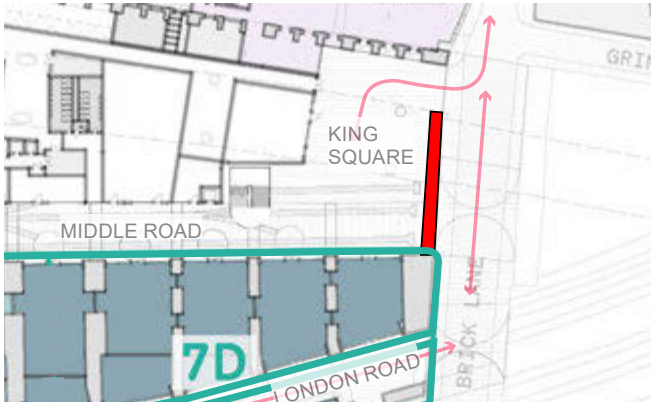


Fig 6.3.98: Plan showing part of wall to be demolished

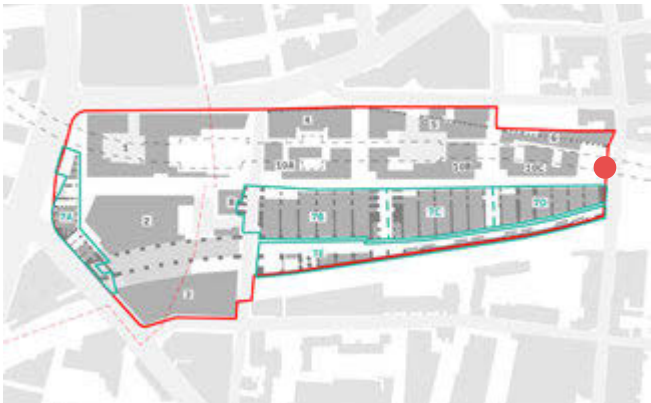


Fig 6.3.99: Key Plan



Fig 6.3.101: The boundary wall, Brick Lane

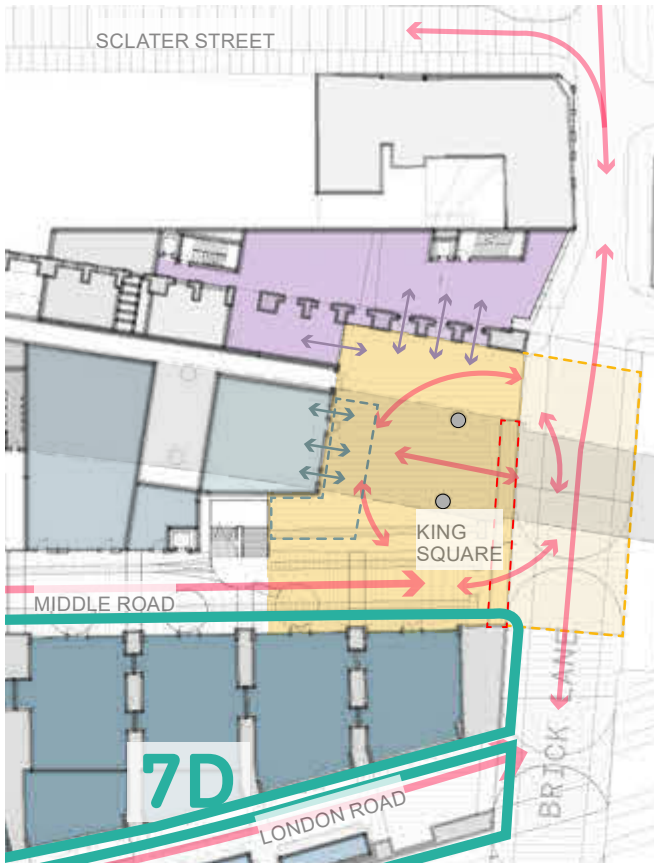


Fig 6.3.100: A new animated public square

- Plot 7 Boundary
- Pedestrian routes
- New square
- Brick Lane spillout
- Demolished wall
- Potential for cultural spillout
- Potential for cafe spillout
- A1
- A3
- Cultural



