

UTILITIES ASSESSMENT

Leaside Business Centre, 43 – 45 Gillender Street, E14 6RN

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Utilities Assessment
003
July 2019

REPORT

Quality Management

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- APPENDIX F: Affected Asset Plans

1 INTRODUCTION

- 1.1 This report has been prepared in order to assess the capacity of the surrounding utilities network to accommodate the proposed redevelopment of the existing Leaside Business Centre on 43 – 45 Gillender Street, E14 6RN. The site is proposed to be redeveloped for 22 residential units and 500 m² of commercial use.
- 1.2 This report is compiled using information obtained from the following main local utility service providers:
 - Thames Water;
 - Cadent Gas;
 - UK Power Networks; and
 - British Telecom.
- 1.3 An additional search has been undertaken to establish the presence of any infrastructure owned or operated by other local utility providers.
- 1.4 Each provider had been asked to provide written confirmation that the surrounding network has sufficient capacity to serve the proposed development. The utility companies will review their own records and maps of the immediate vicinity and consider the existing loadings on the surrounding network.
- 1.5 Once the existing network has been reviewed, the providers can establish the feasibility of using existing infrastructure to serve the proposed development, and where required, establish the extent of upgrade/ reinforcement works that may be required to serve the development.
- 1.6 In an event that the surrounding network does not have sufficient capacity, the provider has been instructed to provide an alternative approach to feed the development.
- 1.7 Information received from the utility providers is included within the appendices of this report.
- 1.8 The relevant pre-planning queries were submitted on the basis of the most up to date plans at the time (i.e. redevelopment of existing business centre to provide 22 residential units and some 500 m² of commercial space).

2 PROPOSED DEVELOPMENT

- 2.1 The site is located near Bromley-by-Bow at National Grid Reference TQ 38192 81898. The site is located within a predominately commercial setting.
- 2.2 The application site contains an area of 0.22 hectares and is located on the east side of the A12 Blackwall Tunnel Northern Approach Road; approximately 1km north of the entrance to the tunnel. The site includes the following three buildings:
- Bromley Hall (43 Gillender Street) a two-storey historic dwelling (Grade II* Listed) with a floor area of 320 m². The building is located in the north-western corner of the site, adjacent to the A12 Road at its junction with Gillender Street. The building was refurbished and converted in 2006 to provide thirteen small office units and is currently let out for business use (Use Class B1a).
 - RedBox (44 Gillender Street) a three-storey temporary building constructed from recycled shipping containers. The building was completed in 2004 and is located in the north-eastern corner of the site. It has a floor area of 639 m² and contains twenty serviced office units for small businesses (Use Class B1a).
 - Old Poplar Library (45 Gillender Street) a three-storey former library (Grade II Listed) with a floor area of 530 m². The building is located on the south-western boundary of the site adjacent to the A12 Road. Its use as a library ceased on the 29th August 1991 and it was refurbished and converted in 2002 to eleven serviced office units for small businesses (Use Class B1a).
- 2.3 It is understood that the application seeks planning permission for the redevelopment of these buildings for residential and commercial use. This will include 22 residential units in the north east of the site spread across four floors (ground to fourth floor) and some 500 m² of commercial space proposed in the west of the site, spread across two floors (ground to second floor).
- 2.4 The proposed development plans are included in **Appendix A**.

3 GAS

- 3.1 Cadent Gas (CG) are responsible for the supply of gas within the vicinity of the site.
- 3.2 RPS submitted a capacity check enquiry with CG to check that the existing system has sufficient capacity to serve the development and whether any upgrade/ reinforcement work will be required to accommodate the development.
- 3.3 CG have provided an asset location plan which identifies the location of gas mains within the vicinity of the site. The asset location plan identifies the presence of a low-pressure gas main located in the centre of the site located immediately north of the existing library and works unit. This gas main is identified as being connected to a low-pressure gas main within Blackwall Tunnel Northern Approach Road (A12) via a valve. The onsite and offsite gas mains are identified as:
- Onsite
 - 32 PE LP Main;
 - 1" ST LP Main.
 - Offsite (approximately 5 m west)
 - 63 PE LP Main.
- 3.4 A capacity enquiry has been submitted to CG to confirm if the existing network has enough capacity to feed the proposed development.
- 3.5 CG previously only provided a response for the proposed residential element. CG requested additional information via email regarding the proposed commercial units (email request received 21st May 2019). This information has since been provided and CG have updated their response to include for both the residential and the commercial element of the proposed development.
- 3.6 In regard to the proposed residential units and commercial unit, CG have confirmed that the low pressure gas main located within the site boundary has sufficient capacity to serve the proposed residential units and commercial unit.
- 3.7 All correspondence and information provided by CG is included as **Appendix B**.

4 ELECTRICITY

- 4.1 UK Power Networks (UKPN) are responsible for the supply of electricity within the vicinity of the site.
- 4.2 UKPN have provided asset location plans to show the location of their assets in proximity to the site. The plans show the presence of multiple Low Voltage (LV) electricity cables serving the site. The plans indicate that the existing site appears to be served by a number of existing electricity cables.
- 4.3 A capacity enquiry has been submitted to UKPN to confirm if the existing network has enough capacity to feed the proposed development.
- 4.4 UKPN have since responded and provided a budget estimate for serving the proposed development. They have provided a budget estimation for the following works to be carried out.
- 4.5 Within their response, UKPN have made the following assumptions:
- The most appropriate Point of Connection (POC) is located 150m North of the existing site along the East Side of Gillender Street.
 - A viable cable or overhead line route exists along the route we have assumed between the POC and the site;
 - In cases where the POC is to be at High Voltage, that a substation can be located on the premises at or close to the position that UKPN have assumed;
 - Where electric lines are to be installed in private land, UKPN will require an easement in perpetuity for its electric lines and in the case of electrical plant, the freehold interest in the substation site, on UKPN terms, without charge and before any work commences;
 - You will carry out, at no charge to UKPN, all the civil works within the site boundary, including substation bases, substation buildings where applicable and the excavation/reinstatement of cable trenches;
 - Unless stated in your application, all loads are assumed to be of a resistive nature. Should you intend to install equipment that may cause disturbances on UKPN's electricity distribution system (e.g. motors; welders; etc.) this may affect the estimate considerably; and
 - All UKPN's work is to be carried out as a continuous programme of work that can be completed substantially within 12 months from the acceptance of the formal offer.
- 4.6 UKPN have given a budget estimate for carrying out the following works:
- It is proposed to establish a new 500kVA 11kV/LV substation on the site with associated 11kV cabling from the assumed HV point of connection to provide 260kVA. The site will be given their proposed service at LV via 1 x 400A Un metered Metered Service. Any existing connection are expected to be removed at the same time phase of works.
- 4.7 Based on the above assumptions and proposed works, UK Power networks have provided the following budget estimate:
- High Voltage Point of Connection
 - £150,000.00- 175,000.00 (exclusive of VAT) if the POC is to the UKPN High Voltage network which is located 150m north of the existing site along the East Side of Gillender Street E14.
- 4.8 All correspondence and information provided by UK Power Networks is included in **Appendix C**.

5 SEWERAGE AND POTABLE WATER

- 5.1 Thames Water (TW) are responsible for the provision of foul and surface water sewers and clean water mains in this area.

Foul Water Sewerage

- 5.2 TW Asset Location Plans (included as **Appendix D**) identify the following foul water features within the vicinity of the site:

- A 2550 mm Trunk combined sewer running through the centre of the site;
- A 305 mm combined sewer located approximately 5 m west of the site within Blackwall Tunnel Northern Approach Road (A12); two manholes were noted in proximity to this site located along this run (no cover levels or invert levels were identified on the plan):
 - North west of the site is manhole 1917;
 - South west of the site is manhole 1802;

- 5.3 A pre-development enquiry has been undertaken with TW in relation to the discharge of foul water generated from the proposed development into the existing foul water network. TW have since responded on the 31st May 2019 (with their response included as Appendix D) and have identified the following:

- There will be sufficient capacity in the sewerage network to serve the proposed development.

Potable Water

- 5.4 TW asset location plans (included as **Appendix D**) identify the following clean water assets within the vicinity of the site:

- A 152.4 mm distribution main located within Blackwall Tunnel Northern Approach Road (A12) approximately 5 m west of the site; and,
- A 381 mm trunk main located within Blackwall Tunnel Northern Approach Road (A12) approximately 6 m west of the site.

- 5.5 A pre-development enquiry has been undertaken with TW response in relation to the supply of clean water for the proposed development. Their response was received on the 29th May 2019 and stated the following:

- There will be sufficient capacity in the clean water network to serve the proposed development.

- 5.6 The TW response is included within **Appendix D**.

6 BRITISH TELECOM

- 6.1 BT Openreach (BT) are the regional telecommunications operators for this site. Based on the available plant records (included as **Appendix E**) there are existing BT services present at the site and in close proximity to the site.
- 6.2 A land enquiry has been submitted to BT to confirm if their existing infrastructure will be able to service the proposed development.
- 6.3 A response from BT regarding the land enquiry was received on the 22nd May 2019 and is described below:
- Openreach can provide the development with a standard telephone and broadband service free of charge.
- 6.4 The BT's website advises that they will deploy FTTP (Fibre to The Premises), free of charge, into all new housing developments of 30 or more homes.
- 6.5 Correspondence with BT is included as **Appendix E**.

7 ADDITIONAL SERVICE

- 7.1 RPS has contacted the following services to see whether their infrastructure would be affected by the proposed development. Any service providers that have responded 'yes' to being potentially affected by the proposed development, have provided plans to show the location of their assets in proximity to the site boundary. These have been included in **Appendix F**.
- 7.2 The location of services within the site should be confirmed via an appropriate survey prior to the commencement of any construction works.

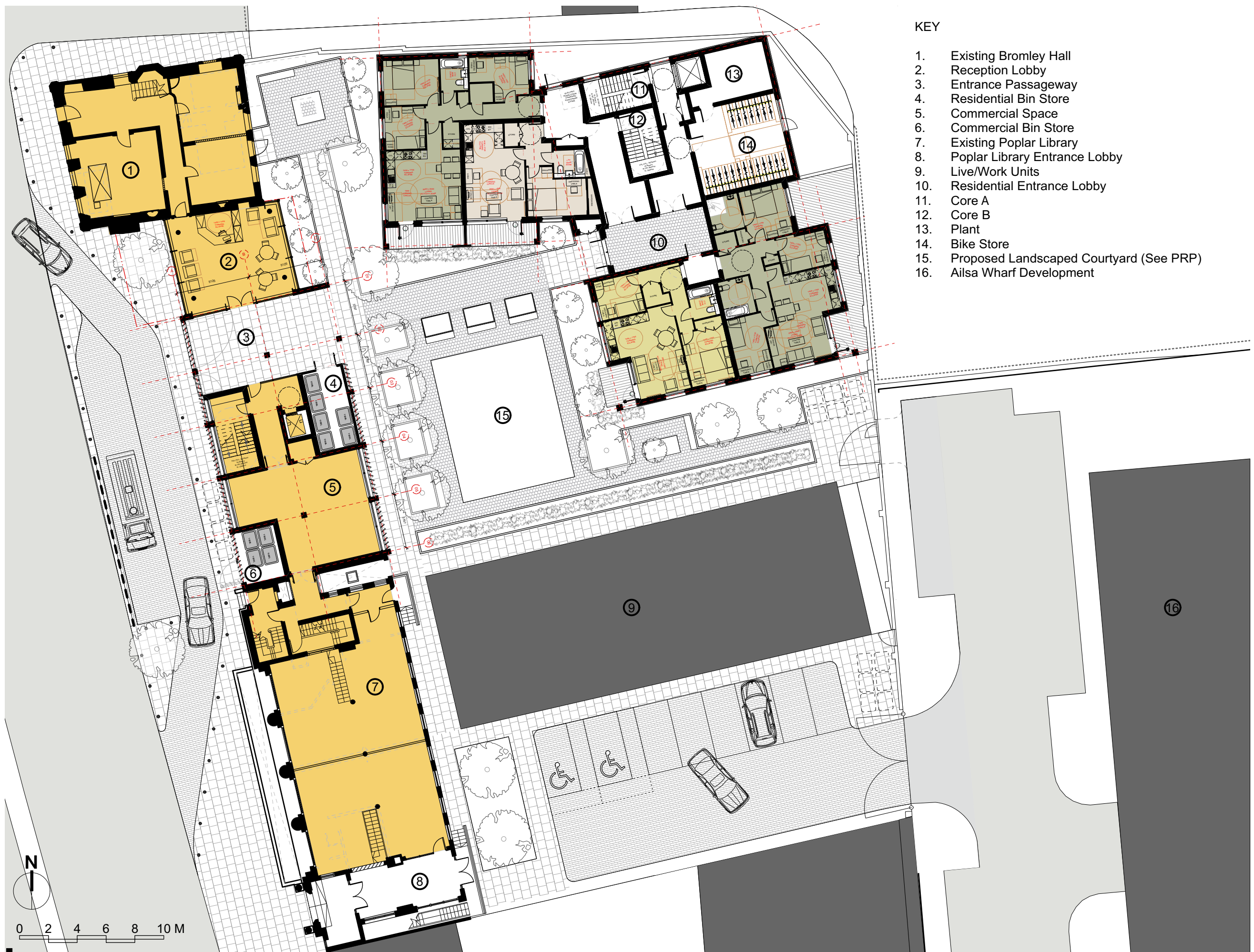
Company	Utility / Service	Affected – yes / no
ESP Utilities Group	Electricity Provider	No
Gtt	Communications / fibre optic equipment	No response
Tata Communications	Communications / fibre optic equipment	No
UK Power Networks	Electricity Provider	Yes
Zayo Group UK Ltd c/o JSM Group Ltd	Communications / fibre optic equipment	Yes
BT	Communications / fibre optic equipment	Yes
Cadent Gas	Gas provider	Yes
CenturyLink Communications UK Limited	Telecommunications	No
CityFibre	Communications / fibre optic equipment	No

Colt	Communications/fibre optic equipment	No
Cross rail	Rail Network	No
Energetics Electricity	Electric	No
ENGIE	Electric & Telecom	No
GTC	Communications/fibre optic equipment	No
KPN (c/-Instalcom)	Communications / fibre optic equipment	No response
Mobile Broadband Network Limited	Communications/fibre optic equipment	No
Sky UK Limited	Communications/fibre optic equipment	Indirectly affected via Virgin Media
Sota	Utility Contractor	No
Teliasonera	Communications/fibre optic equipment	No
Thames Water	Sewer Provider	Yes
Utility assets Ltd	Plant/Equipment	No
Verizon Business	Communications/fibre optic equipment	Yes
Virgin Media	Communications/fibre optic equipment	Yes
Vodafone	Plant/Equipment	Yes



APPENDIX A

Proposed Development Plans



KEY

1. Existing Bromley Hall
2. Reception Lobby
3. Entrance Passageway
4. Residential Bin Store
5. Commercial Space
6. Commercial Bin Store
7. Existing Poplar Library
8. Poplar Library Entrance Lobby
9. Live/Work Units
10. Residential Entrance Lobby
11. Core A
12. Core B
13. Plant
14. Bike Store
15. Proposed Landscaped Courtyard (See PRP)
16. Ailsa Wharf Development

KEY

1. Bromley Hall
2. Green Roof
3. Proposed Commercial Space
4. Old Poplar Library Commercial Space
5. Live/Work Units
6. Core A
7. Potential Storage Room



LEASIDE BUSINESS CENTRE FEASIBILITY

FLOOR 02

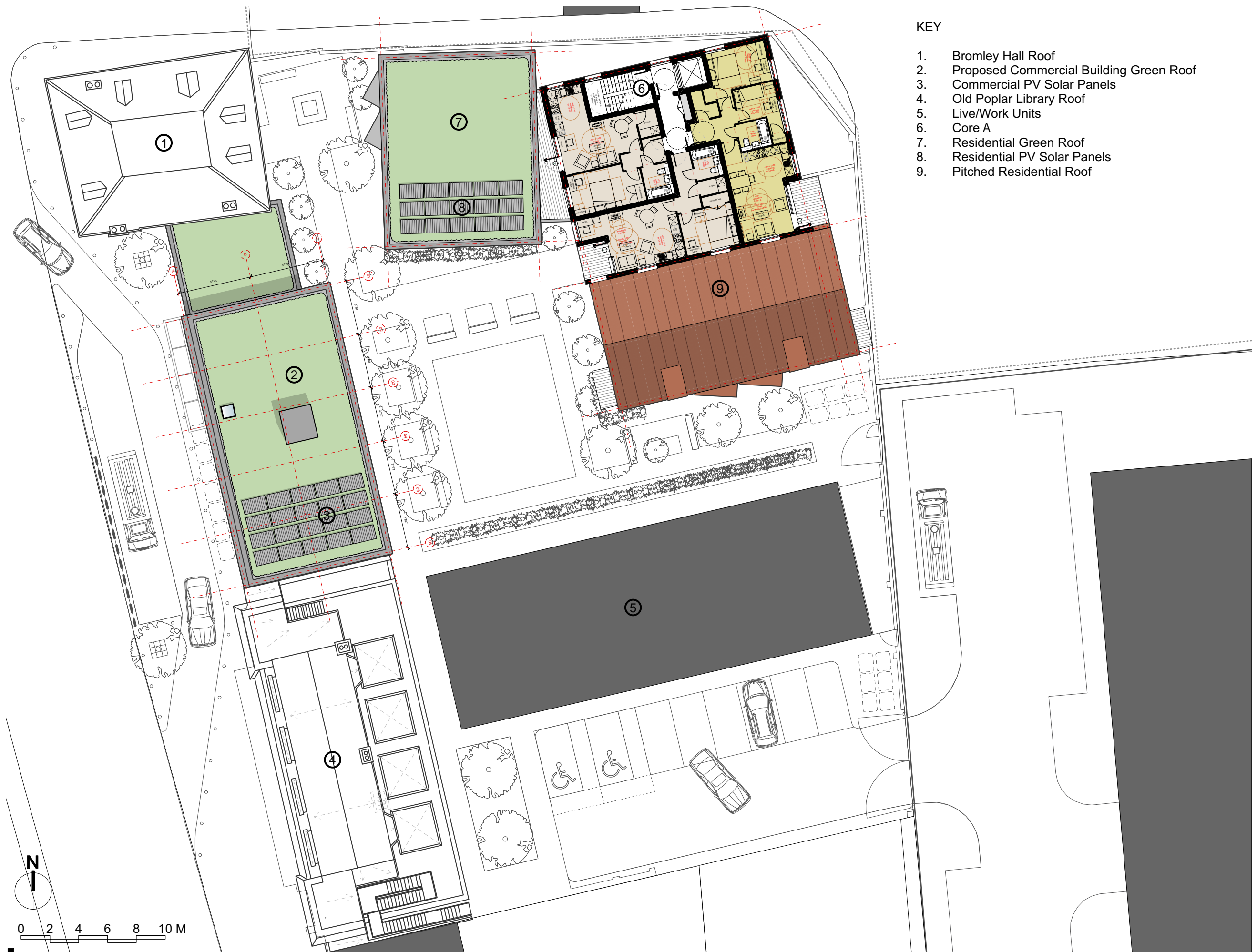
**stock
wool**

The Pump House 19 Hooper Street London E18BU 0207 264 8600 info@stockwool.co.uk © STOCKWOOL

SK103 | 1:250 @ A3 | 17.05.19

KEY

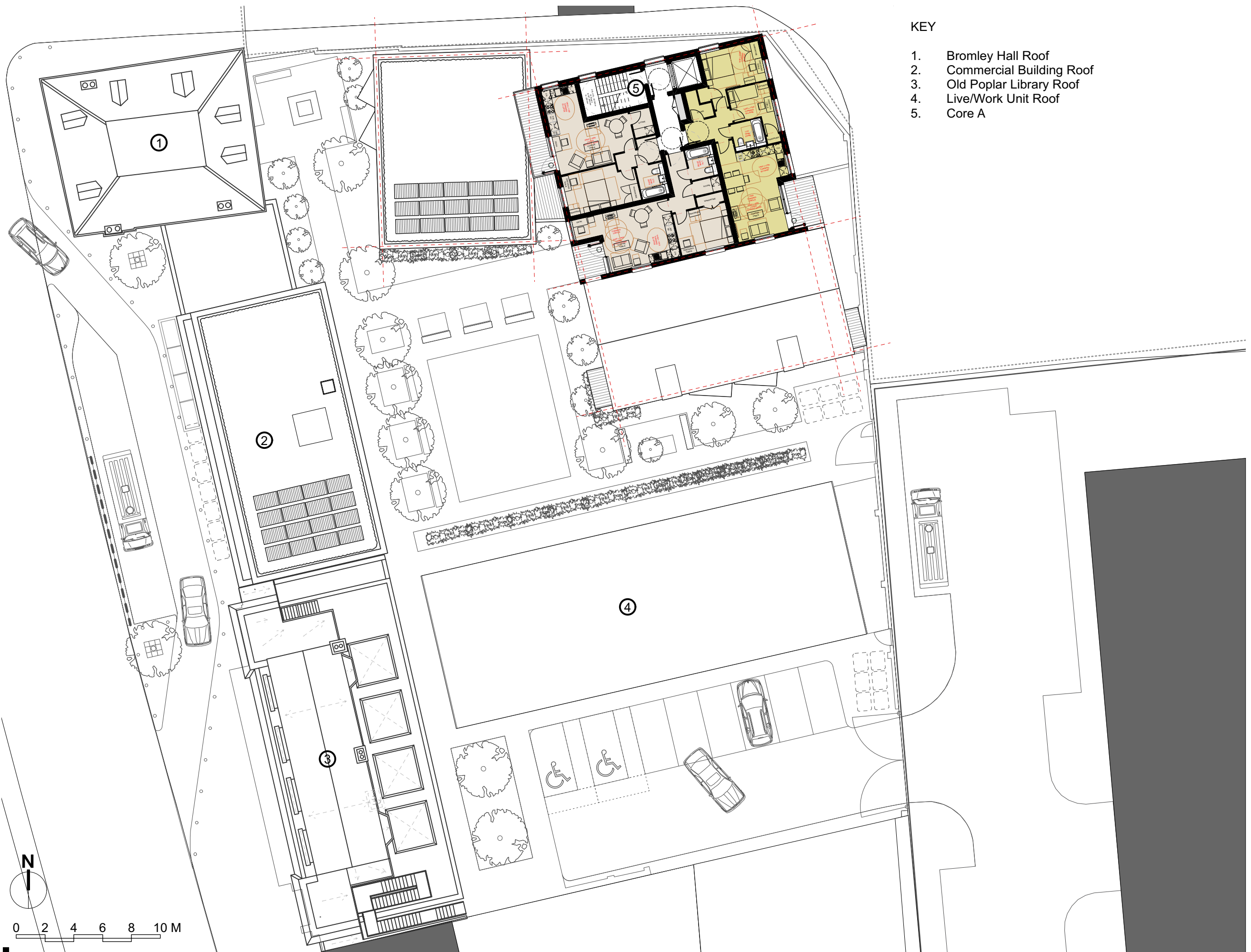
1. Bromley Hall Roof
2. Proposed Commercial Building Green Roof
3. Commercial PV Solar Panels
4. Old Poplar Library Roof
5. Live/Work Units
6. Core A
7. Residential Green Roof
8. Residential PV Solar Panels
9. Pitched Residential Roof



LEASIDE BUSINESS CENTRE FEASIBILITY

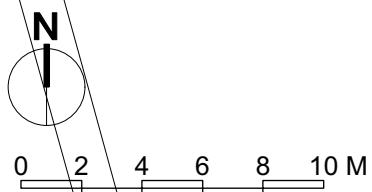
FLOOR 03

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KEY

- 1. Bromley Hall Roof
- 2. Commercial Building Roof
- 3. Old Poplar Library Roof
- 4. Live/Work Unit Roof
- 5. Core A





KEY

1. Bromley Hall Roof
2. Proposed Commercial Building Roof
3. Old Poplar Library Roof
4. Live/Work Units
5. Proposed Residential Roof



KEY

1. Bromley Hall
2. Entrance Passageway
3. Deliveries Bay
4. Shared surface Access Road/Pavement
5. Disabled Parking Bays with Protective Barrier
6. Bin Collection Area
7. Commercial Unit
8. Old Poplar Library
9. Live/Work Units
10. Proposed Residential Entrance Lobby
11. Additional Outdoor Cycle Store
12. Proposed Landscaped Courtyard (See PRP)
13. Area reserved for future Refuse Store & Deliveries Zone
14. Area cleared for Proposed Car Park
15. Proposed Ailsa Wharf Development (Under Construction)
16. A12 Blackwall Tunnel Northern Approach Road