

HWO ARCHITECTS

**13 RED LION SQUARE,
LONDON, WC1R**



UTILITIES & SERVICING STATEMENT

REPORT REF. Y740-001B

PROJECT NO. Y740

DECEMBER 2015

**13 RED LION SQUARE,
LONDON WC1R**

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DOCUMENT CONTROL SHEET

REV	ISSUE PURPOSE	AUTHOR	CHECKED	APPROVED	DATE
-	1 st draft for project team review	OF	BB	TRF	26/11/15
-	Final submitted for planning	OF	BB	SJB	27/11/15
A	Final submitted for planning	OF	BB	TRF	03/12/15
B	Final submitted for planning	OF	NT	TRF	21/12/15

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1.0 EXECUTIVE SUMMARY

1.1. This report demonstrates that the proposed residential development of 13 units at 13 Red Lion Square, Camden can be supplied with gas, electricity, potable water, sewage infrastructure and telecommunication connection, from supplies within the immediate vicinity of the site. No offsite diversionary or reinforcement works are anticipated to implement the development proposals.

Gas

1.2. National Grid has provided an asset plan indicating Low Pressure mains within Red Lion Square and Dane street. It has been confirmed that there is currently sufficient capacity within the existing network to supply the site from either of the adjacent mains in Dane Street or Red Lion Square without the need for offsite reinforcement.

Electricity

1.3. UK Power Networks asset plans have been received, the plans indicate a number of Extra High Voltage (EHV) and Low Voltage (LV) mains within the vicinity of the site. UKPN have confirmed that no offsite reinforcement works are required.

Telecommunications

1.4. BT Openreach asset plans show existing points of connection into the site. Due to the development having no impact on the surrounding footway, asset plans for other telecommunications companies were not pursued.

Potable Water

1.5. Thames Water has confirmed that there is currently sufficient capacity within the existing network to supply the site from the adjacent mains without the need for offsite reinforcement.

Foul and Surface Water Drainage

1.6. Thames Water asset plans shows that the area is served by a network of combined sewers. A response from Thames Water

regarding the pre development report is yet to be received however, it is likely that the small increase in foul water discharge to the combined sewer will be accepted.

Underground Tunnels

- 1.7. Crossrail has indicated that their tunnels pass directly underneath the site. London Underground tunnels have been shown near to the site. The development will not affect these tunnels as only refurbishment works to the existing building structure are proposed.

2.0 INTRODUCTION

- 2.1. Ardent Consulting Engineers (ACE) has been commissioned by HWO Architects to provide a Utilities and Servicing Statement for the proposed residential development at 13 Red Lion Square, Camden. This report has been prepared to support a detailed planning application to the local planning authority, the London Borough of Camden, for the refurbishment of existing buildings within the site to provide 13 units in the 6 storey building.
- 2.2. In preparation of this report, ACE has consulted with the relevant Statutory Undertakers that provide services in the area.
- 2.3. It should also be noted that elements of this report have been produced on the basis of information received from relevant service companies and as such, ACE cannot accept responsibility for the accuracy of the information received.
- 2.4. Copies of the correspondence received from the Statutory Undertakers have been provided in the appendices of this report for further reference.
- 2.5. This report aims to provide a summary of the provision of utilities to serve the development and demonstrate that the Site can be suitably served without having a detrimental impact on the surrounding networks and environs. Where reinforcement works are required, these have been outlined and an acknowledgement of developer contributions provided.

3.0 BASELINE PARAMETERS

Site Location



Figure 3-1: Site Location Plan and Aerial Photo

- 3.1. The Site, circa 0.1ha in size, is located in the southern region of the London Borough of Camden; approximately at OS Grid Co-ordinates 530463mE, 181698mN.
- 3.2. As shown in **Figure 3-1**, the Site is located approximately 200m northwest of Holborn Underground station and 350m south of Great Ormond Street Hospital.
- 3.3. The Site is situated in Dane Street and Red Lion Square at west and north sides respectively. The site is attached to residential properties on the south and east sides. The Site is currently accessed from Dane Street and Red Lion Square.

Existing Land Use

- 3.4. Red Lion Square itself is primarily residential in nature but also comprising elements of commercial office spaces in the wider context.
- 3.5. The existing site currently takes the form of 12 residential C3 units in unit number 13.

4.0 DEVELOPMENT PROPOSALS

4.1. This comprehensive submission comprises the refurbishment of an existing building to provide 13 residential units. The specific breakdown of the proposals is as follows:

Residential

- 13 residential units;
 - 2 x 1-bedroom studio flats
 - 2 x 1-bedroom
 - 6 x 2-bedroom flats
 - 2 x 3-bedroom flats
 - 1 x 4-bedroom flat
- 60sqm of ancillary residential floorspace (lobby).

4.2. The proposed architectural site layout plan is attached at **Appendix A**.

Access

4.3. It is proposed that 2 pedestrian access/egress points will be provided to serve the development. No onsite parking or vehicular access is proposed as part of the development.

5.0 UTILITY SERVICE PROVISION

Introduction

- 5.1. All relevant Statutory Undertakers have been consulted in relation to the proposed development.
- 5.2. Each Statutory Undertaker with known plant in the region has been contacted and requested to provide details of:
 - Existing assets in the area;
 - The requirement for any off-site reinforcement works to meet the peak load demand generated by the development proposals;
 - The potential point of connection to the existing supply distribution network.
- 5.3. Statutory undertakers with known plant in the region were not contacted regarding any diversionary works due to the scope of the works which does not exceed the original footprint of the building and the absence of any proposed works to the surrounding highways.
- 5.4. Consultation with the various Utility Companies was based on a development of up to 15 residential units.

Approximate Utility Demands

- 5.5. Anticipated approximate utility demands for the Site were provided to utility providers, derived using BSRIA Guidance Documents and common benchmarks.
- 5.6. The following approximate loadings have been used to inform the overall Site demands.

Land Use	Electricity Peak kVA (per unit)	Gas		Potable Water (l/head/day)	Foul Water l/day (per unit)
		Peak W (per unit)	Annual kWh (per unit)		
Residential flat	8.25	8540	8022	160	4000

Table 5-1: Approximate Utility Demands

Surrounding Consented Use Development

5.7. Enquiries issued and responses received from some utility companies in relation to capacity (within the context of this report) include 14-17 Red Lion Square, which falls under the same ownership, although does not form part of this planning application.

Statutory Undertakers Unaffected by the Proposals

5.8. The following statutory undertakers have confirmed that they are not affected by the development proposals:

AWE Pipeline	Ineos Enterprises Limited
BOC Limited	Ineos Manufacturing (Scotland and TSEP)
BP Midstream Pipelines	Instalcom
BPA	Lark Energy
BSkyB	National Grid Gas (above 2 bar)
Carrington Gas Pipeline	National Grid Electricity Transmission
Centrica Energy	Northumbrian Water Group
Centrica Storage Ltd	Npower CHP Pipelines
CLH Pipeline System Ltd	Oikos Storage Limited
ConocoPhillips (UK) Ltd	Perenco UK Limited (Purbeck Southampton Pipeline)
Coryton Energy Co Ltd (Gas Pipeline)	Phillips 66
CSP Fibre c/o Centara	Premier Transmission Ltd (SNIP)
EirGrid	Redcentric plc
Electricity North West Limited	Redundant Pipelines - LPDA
E-on UK Plc (Gas Pipelines Only)	RWEnpower (Little Barford and South Haven)
ESP Utilities Group	SABIC UK Petrochemicals
ESSAR	Scottish Power Generation
Esso Petroleum Company Limited	Seabank Power Ltd
FibreSpeed Limited	Shell Pipelines
Gamma	SGN (Southern Gas Networks)
Humbly Grove Energy	Teliasonera
HV Cables	Total (Finaline, Colnbrook & Colwick Pipelines)
IGas Energy	Transmission Capital
Lightsource SPV Limited	UK Broadband
Mainline Pipelines Limited	Vattenfall
Manchester Jetline Limited	Western Power Generation
Manx Cable Company	Wingas Storage UK Ltd
Marchwood Power Ltd (Gas Pipeline)	Zayo Group UK Ltd c/o JSM Group Ltd

6.0 GAS SUPPLY

6.1. Asset record plans provided by National Grid Gas (NGG) illustrate the presence of existing supply networks in close proximity to the site as shown in **Figure 6-1** below:

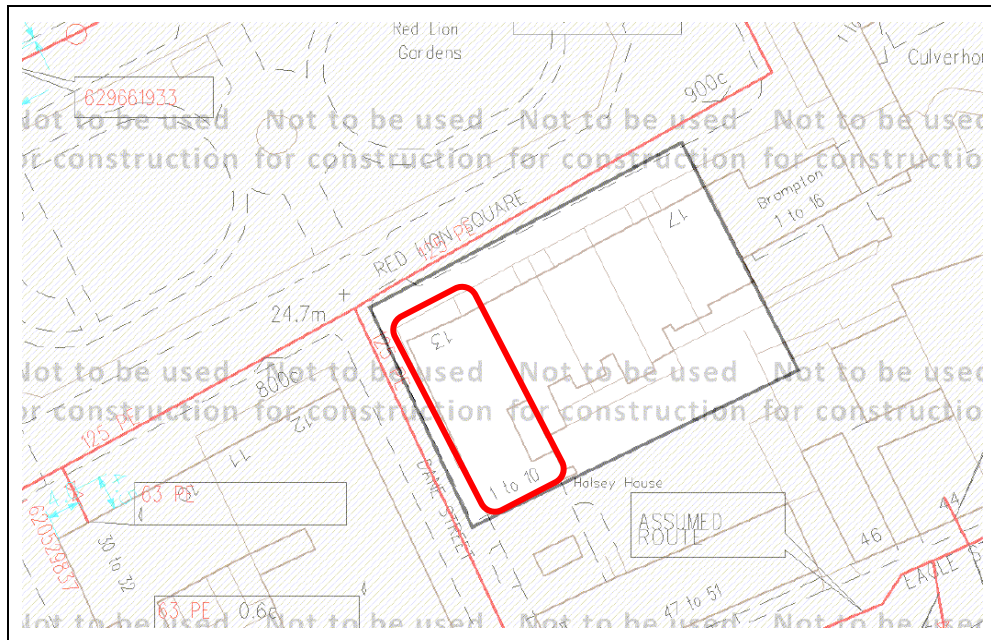


Figure 6-1: National Grid Asset Mapping (Extract)

- 6.2. There are no assets owned by National Grid which encroach into the site boundary. A 125mm Low Pressure (LP) Polyurethane main runs within the carriageway of Dane Street and Red Lion Square close to the development.
- 6.3. National Grid has confirmed the proposed development can be served with gas, using residual capacity within the LP Main from either Red Lion Square or Dane Street, without the need for off-site reinforcement works.
- 6.4. National Grid correspondence can be found within **Appendix B**.

7.0 POTABLE WATER

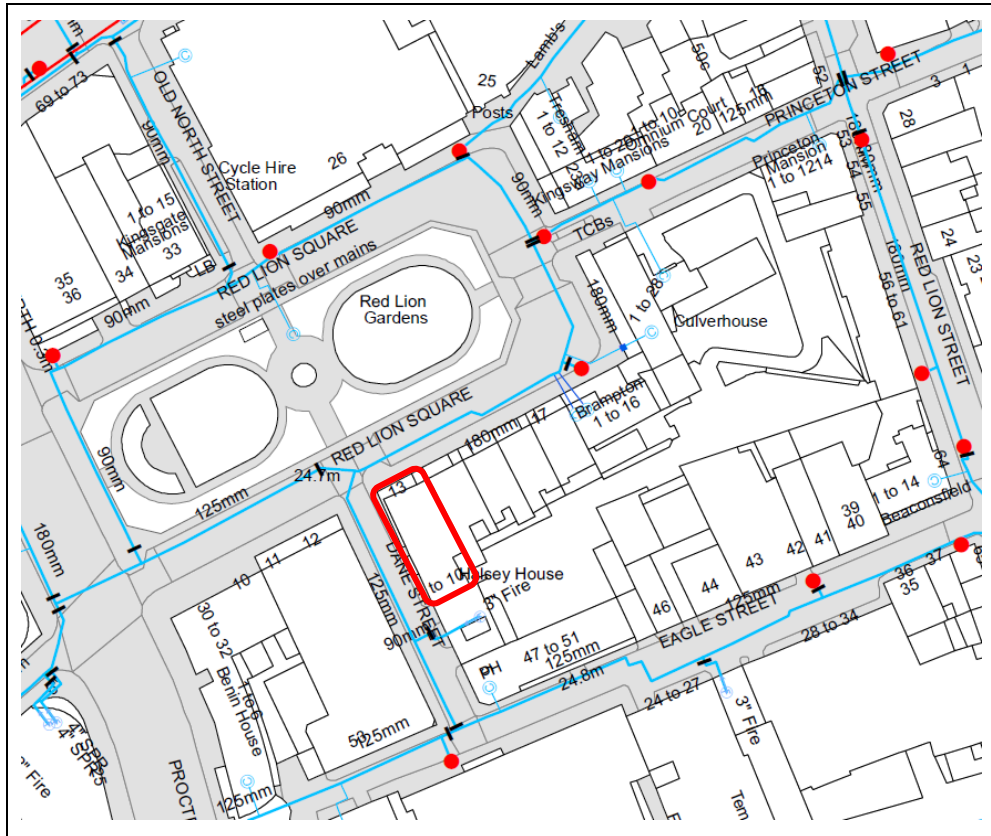


Figure 7-1: Thames Water Asset Mapping Extract (Potable Water)

- 7.1. Asset plans of the existing potable water supply network have been obtained from Thames Water as shown in **Figure 7-1** above.
- 7.2. Thames Water record plans indicate a 180mm diameter HPPE main beneath the carriageway of Red Lion Square to the north of the site and a 125mm diameter HPPE main beneath the carriageway of Dane Street to the west. There are no customer supplies shown on the asset plan.
- 7.3. As demonstrated through Thames Water’s response, it is confirmed that the site at 13 Red Lion Square will ultimately utilise residual capacity still available within the network as no offsite main and reinforcement works are required.
- 7.4. A single incoming tank and pump will be installed inside the building to serve the high-rise flats.

7.5. Thames Water anticipate that no clean water asset diversionary works are required to accommodate the development proposals.

7.6. Correspondence from Thames Water is provided in **Appendix C**.

8.0 ELECTRICITY

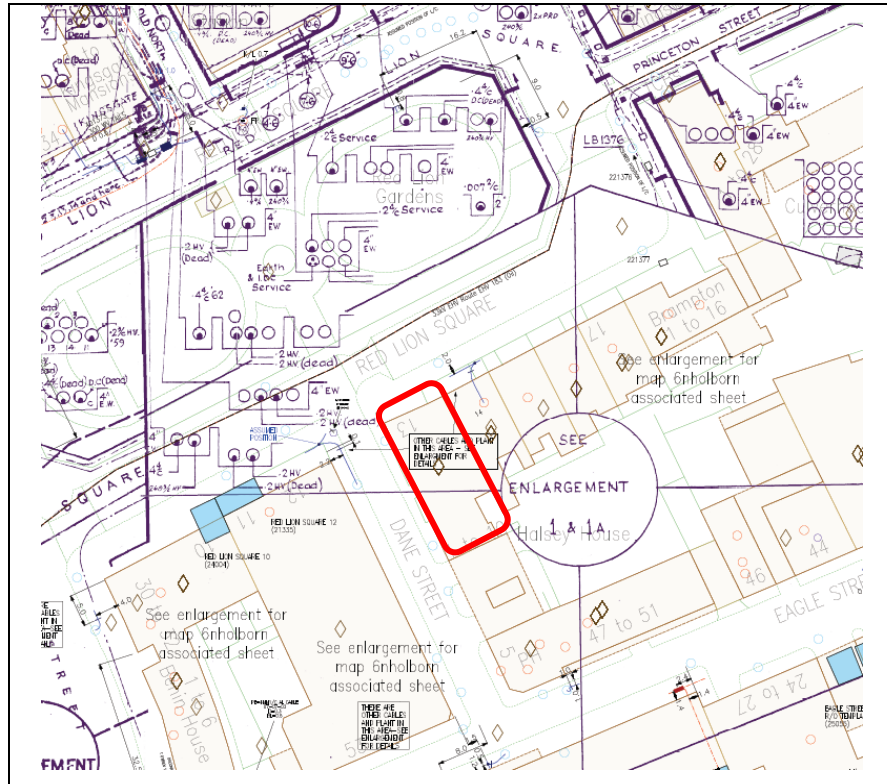


Figure 8-1: UK Power Networks Asset Mapping (Extract)

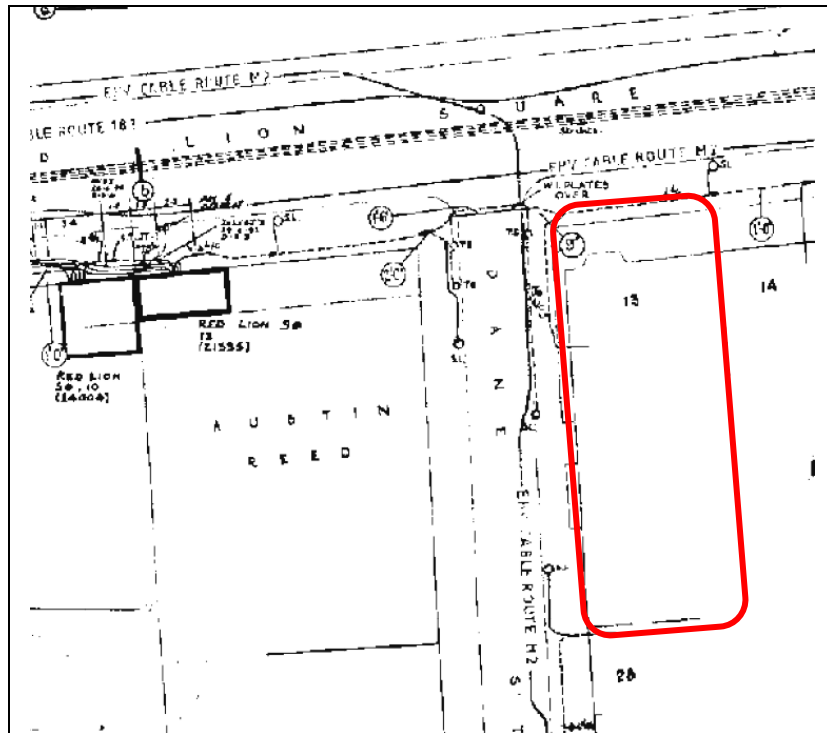


Figure 8-2: UK Power Networks Asset Mapping (Extract)

- 8.1. Record plans of the existing electricity distribution network have been obtained from UK Power Networks which illustrate an Extra High Voltage (EHV) network and a Low Voltage (LV) network in the carriageway of Red Lion Square and Dane Street as shown in **Figure 8-1** and **Figure 8-2** above respectively. In addition to this, two points of connection to the site can be seen in **Figure 8-2** from Dane Street.
- 8.2. It has been confirmed by UK Power Networks that the proposed development can be provided with a connection to the adjacent LV network without the need for a substation or any reinforcement works.
- 8.3. Correspondence from UK Power Networks can be found in **Appendix D**.

9.0 TELECOMS

BT Openreach

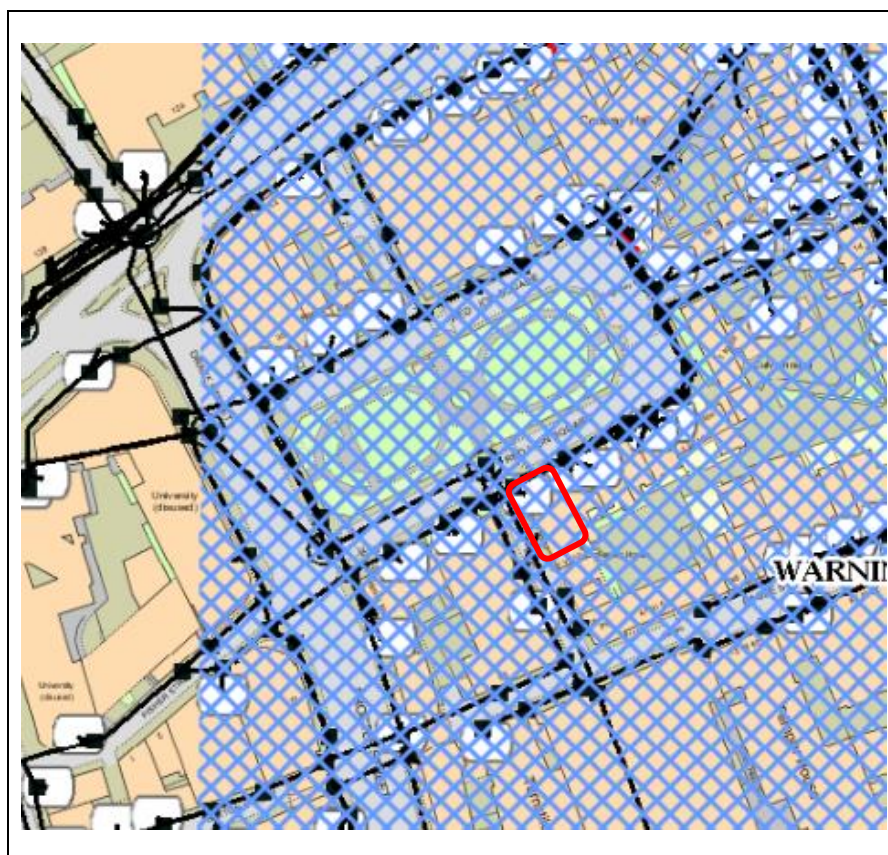


Figure 9-1: BT Telecommunications Asset Plans (Extract)

- 9.1. As shown in **Figure 9-1** above, the asset record plan provided by BT Openreach illustrates that there is existing underground plant located within the footway of Dane Street and Red Lion Square, east and south of the site respectively. In addition, there are two existing site connections which may require disconnection.
- 9.2. In terms of supplying the site, BT is legally obliged to serve the development proposals. Once a planning consent has been granted, detailed costs and a specification of works will be provided by BT Openreach Newsites.
- 9.3. BT Openreach correspondence can be found in **Appendix E**.

10.0 FOUL AND SURFACE WATER DRAINAGE

10.1. The local water authority, Thames Water, has provided asset plans of the existing combined sewerage network around the site, as shown in **Figure 10-1** below.

10.2. A 1295 x 762mm combined sewer runs west within Red Lion Square north of the site. In addition to this a 1118 x 610mm combined sewer runs south within Dane Street. The foul and surface water does not discharge directly into a manhole but most likely (downpipes found only on the west face of the building) through a lateral connection into the combined sewer within Dane Street.

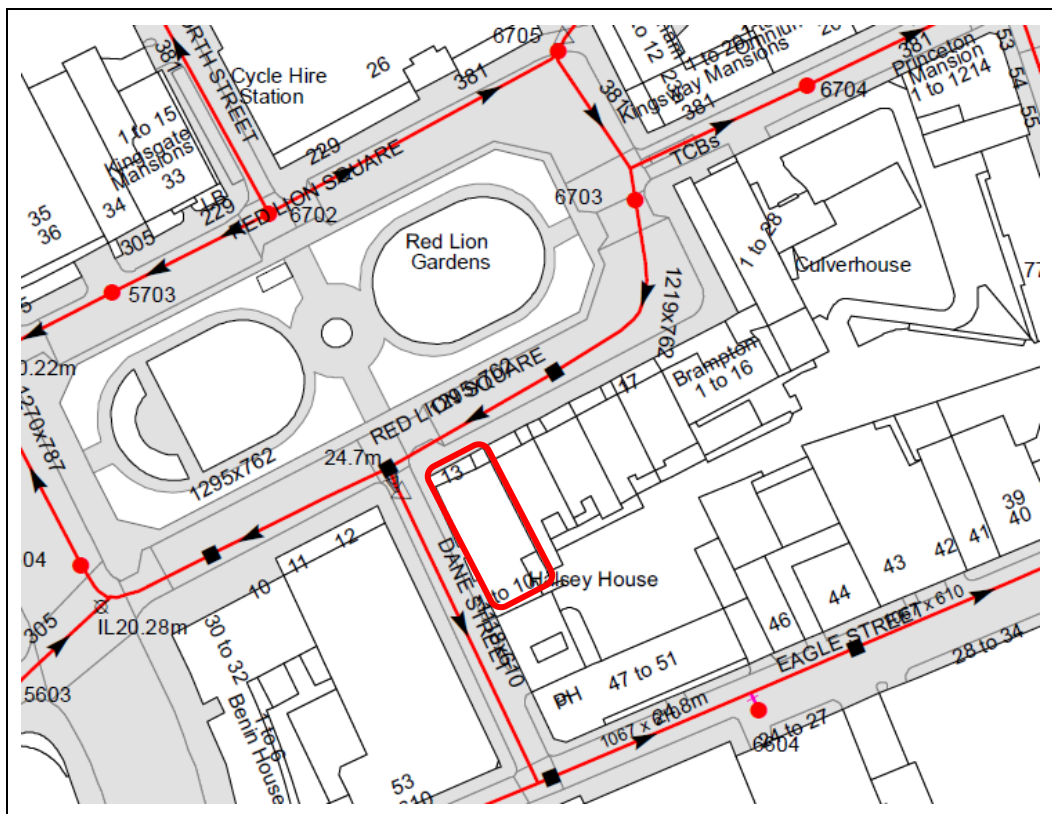


Figure 10-1: Thames Water Asset Mapping Extract

10.3. ACE commissioned Thames Water to produce a pre development report (November 2015) to evaluate the capacity of the existing foul water network and the potential impacts to the existing network as a result of the increased flows from the new development.

- 10.4. A response from Thames Water regarding the pre development report is yet to be received however it is likely that the small increase in foul water discharge to the combined sewer will be accepted.
- 10.5. For more detailed information in relation to foul and surface water capacity and the proposed drainage strategy, reference should be made to ACE report Ref: **Y740-003 Flood Risk Assessment**.

11.0 UNDERGROUND TUNNELS

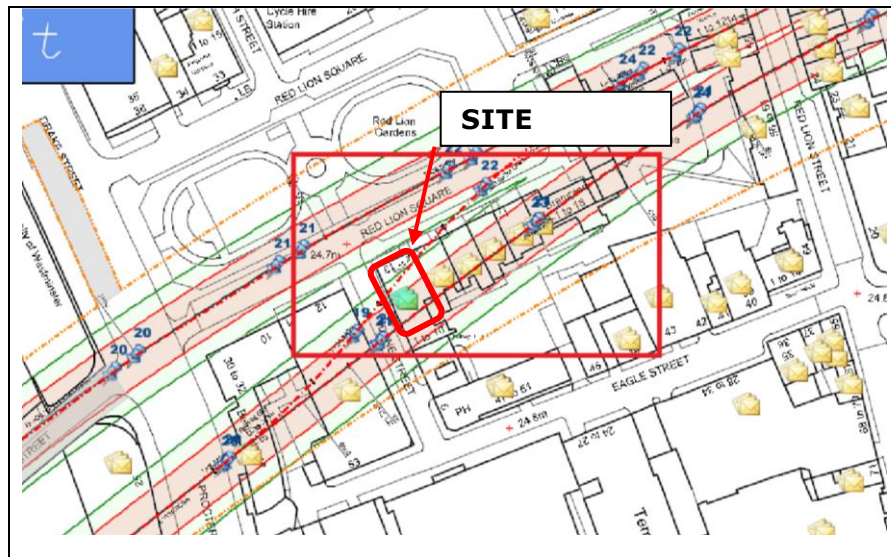


Figure 11-1: Crossrail Asset Plan

- 11.1. As shown in **Figure 11-1** above, the asset record plan provided by Crossrail illustrates one of the underground tunnels passing directly beneath the site.
- 11.2. Notwithstanding the above, as the development involves refurbishment works only, it is not anticipated that Crossrail will be affected by scheme's implementation. A formal response to this effect is awaited.
- 11.3. Crossrail correspondence can be found in **Appendix F**.

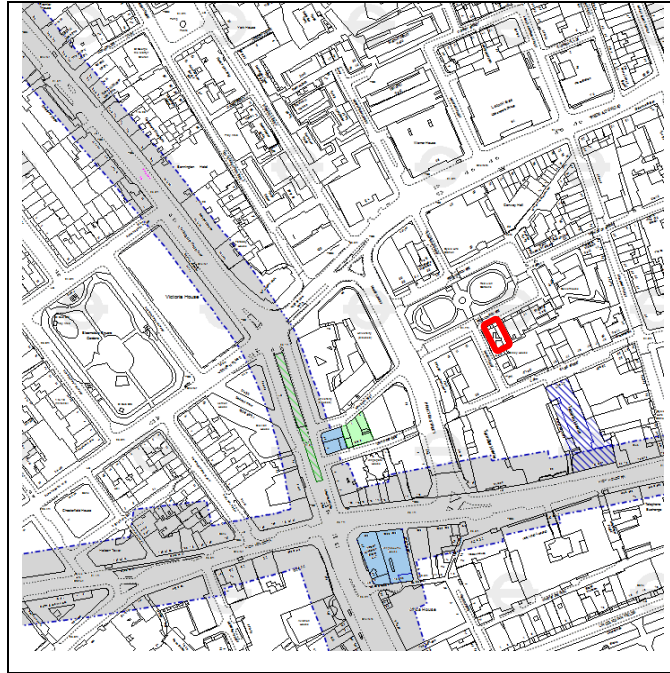


Figure 11-2: TFL Property Asset Register Extract

- 11.4. As shown in **Figure 11-2** above, the property asset register provided by TFL illustrates the Central Line navigating east to west and the Piccadilly Line navigating south to north.
- 11.5. As the development is not in close proximity to either of these lines and the site involves no off site works, TFL's assets will be unaffected.

12.0 CONCLUSION

- 12.1. Based upon a review of utilities record plans provided by the various statutory undertakers, it can be seen that there is gas, power, water and telecom plant within the immediate vicinity of the site. Due to the small increase in demand predicted as a result of the development, no offsite reinforcement works are anticipated. The responses received to date confirm this position.
- 12.2. No works are proposed beyond the site boundary, on this basis no diversionary works are anticipated to plant within the surrounding streets. It should be noted that whilst no diversions are anticipated, temporary disconnection of services to the buildings may be required to facilitate works.