

**KEYBRIDGE HOUSE, 80 SOUTH LAMBETH ROAD,
LONDON BOROUGH OF LAMBETH**

(NGR: 530280 177580)

**HISTORIC BUILDING RECORD
(ENGLISH HERITAGE LEVEL 2)**



**Commissioned by
CgMs Consulting**

Report No. 2015101



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SUMMARY

In March 2015 Archaeology South-East (a division of the Centre for Applied Archaeology, UCL) carried out a programme of historic building recording of Keybridge House, 80 South Lambeth Road, London (NGR: 530280 177580). The work was commissioned by CgMs Consulting in order to fulfil a condition placed on planning permission for the redevelopment of the site (Ref. 13/03935/OUT).

At its decommissioning in 2013, Keybridge House served principally as a telephone exchange, but it was originally purpose-built for the Post Office in 1977 as an international telex exchange. The building was designed by the architects G.W. Mills & Associates. By 1984 the world's largest digital international exchange was operating at Keybridge House.

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1.0 INTRODUCTION

- 1.1 In March 2015 Archaeology South-East (a division of the Centre for Applied Archaeology, UCL) carried out a programme of historic building recording at Keybridge House, 80 South Lambeth Road, London Borough of Lambeth (NGR: 530280 177580; Fig. 1). The work was commissioned by CgMs Consulting in order to fulfil a condition placed on planning permission for the redevelopment of the site (Ref. 13/03935/OUT).
- 1.2 The building was recorded to English Heritage¹ Level 2 standard (English Heritage 2006), in accordance with the requirements of the Government's National Planning Policy Framework (2012).

2.0 SCOPE & METHODOLOGY

- 2.1 The scope of work and methodology for the building recording is detailed in a written scheme of investigation produced for the work by CgMs Consulting, dated January 2015. The work was also carried out in accordance with the relevant ClfA standards and guidance.
- 2.2 The building was recorded to English Heritage Level 2 as defined in *Understanding Historic Buildings: A guide to good recording practice* (English Heritage 2006). A Level 2 record is essentially a descriptive record.
- 2.3 The site was visited by Katya Harrow and Michael Shapland on the 26th March 2015 in order to carry out the recording work. This entailed the compilation of written notes, the verification of existing measured survey drawings, and the production of a photographic record. Access to some parts of the building was restricted in accordance with a risk assessment prepared for the site by Archaeology South-East, due to the presence of asbestos-containing materials. The 15th and 16th floors and roof of the tower block were inaccessible as nesting peregrine falcons were present at the site.
- 2.4 The drawn record comprises floor plans of the building to illustrate its layout. These are based on existing measured drawings supplied by British Telecommunications plc (BT), which have been verified for their accuracy, and amended and annotated where necessary. The resulting scaled drawings are included within the report as Figs. 2-22.
- 2.5 The photographic record was made using high-quality digital photography. Within the report selected images have been reproduced as plates, together with a full index of the digital photography (Appendix 2) and location plots (Figs. 2-22). A full catalogue of all photographs is included in the archive.
- 2.6 An assessment of the cultural heritage of the site and a heritage desk-based assessment were previously prepared as part of an Environmental Statement

¹ Reorganised as Historic England as of the beginning of April 2015

by Waterman Energy Environment & Design Limited (2013a-c), and record the historic background of the site. All sources consulted are listed in Section 7.

3.0 SITE LOCATION

- 3.1 Keybridge House occupies a site south-west of Vauxhall Park in the London Borough of Lambeth. The site is bound to the north by Miles Street, to the east by South Lambeth Road, to the south by Wyvil Road and to the west by buildings on the eastern side of Wandsworth Road. The Clapham Junction – London Waterloo railway line runs north-east – south-west immediately adjacent to the north-west corner of the site, with the south bank of the River Thames lying approximately 350m beyond (NGR: 530280 177580; Figs. 1 & 2).
- 3.2 The site is largely occupied by Keybridge House itself, with a small garden area in its north-east corner and service areas to the south and west. The building is not statutorily listed and lies immediately outside the Vauxhall Conservation Area which abuts the north-east corner of the site (Lambeth Council website).

4.0 HISTORICAL BACKGROUND

- 4.1 The following background concerning the history of the site has largely been derived from the heritage desk-based assessment and cultural heritage chapter of the Environmental Statement previously prepared for the site (Waterman 2015a-c), and from correspondence with Mr Brian Storer of BT Group Property, Operational Building Vacations.
- 4.2 The site of Keybridge House occupies the location of the former Brand's factory, which manufactured potted meat and meat essences and had been built in 1887. The Post Office Journal of winter 1970-71 announced that this site, commonly known as the 'pickle factory', had been acquired and demolition of the factory buildings began in autumn 1970 (Graces Guide; BT 2010).
- 4.3 Keybridge House was purpose-built as a telex exchange and was commissioned in 1975 by the Post Office, which was the monopoly telecoms supplier at the time. It was subsequently occupied by BT. It was designed by the architects G.W. Mills and Associates and was built under Crown Immunity. The initial construction was completed in November 1977 (BT 2010). The name 'Keybridge' arose from the use of keys for telex and providing a 'bridge' i.e. routing calls across the world (BT 2010; Brian Storer, pers. comm.).
- 4.4 A contemporary appraisal of the building in *Hello World* (winter 1977-78) noted: *'Keybridge House has novel architecture, and it has broken away from the pattern of large featureless glasshouse which have become so much a part of the London scene in the past three decades. At each floor level a white concrete beam projects out from the face of the building, breaking up its*

outline and giving an impression of rugged grandeur. This, coupled with full-height stainless steel pods which glisten in the sunlight, contrast sharply with the red brick of its neighbours' (BT 2010).

- 4.5 The building was originally constructed for international telex using electro-mechanical equipment known as Strowger, which was used in the building until 1984. The floors of the building were constructed to take 8 Newtons of weight due to the extent of the equipment required (Brian Storer, pers. comm.).
- 4.6 In February 1982 a new multi-million pound computer-controlled telex exchange, believed to be the largest in the world, opened at Keybridge House to increase capacity and speed. This replaced a smaller less-powerful version introduced in 1978. In 1984 the world's largest digital international exchange opened in Keybridge House with a planned capacity of 800,000 calls per hour (BT 2010).
- 4.7 The building provided an international telephone exchange capable of handling 65,000 calls to 100 countries. Telephone exchanges in the UK initially fed into Keybridge House from where calls were transmitted internationally, and the building served as an inland telex exchange serving 36,000 customers in London. The building contained two telephone switchrooms equipped with 144 cordless switchboards with 450 telephonists handling up to 30,000 calls a day. There was also a telephone service centre for 300 engineers in the basement, accommodating nearly 100 engineering vehicles and hardware storage, and a workshop where up to 10,000 telephones could be refurbished each year (BT 2010).
- 4.8 Keybridge House has also served as a set for films and television programmes including *Interceptors, Muppets, 24 Hours, Luther, Silent Witness, The Gunman, Breathless, Babylon, Legends* and *Law and Order* (Brian Storer, pers. comm.).
- 4.9 The recent decommissioning of the building involved the removal of 2,312 tonnes of scrap metal, 553 tonnes of copper cable, 402 tonnes of steel and 2,211 equipment racks (Brian Storer, pers. comm.).

5.0 DESCRIPTION OF THE BUILDING (FIGS. 2-22)

Overview of the building

- 5.1 Keybridge House comprises two main components: a substantial six-storey L-shaped podium which occupies the majority of the site, to the north side of which is a sixteen-storey tower block. The two structures are linked by a five-storey circulation area, which provides the principal means of access to the building and lifts serving all floors.

Exterior

- 5.2 Both the podium and tower are concrete-framed structures designed in the Brutalist style (Plates 1-4). The elevations of the podium comprise horizontal bands of the projecting concrete framing to each floor and recessed ribbon fenestration, punctuated by vertical service ducts, clad with vertically-channelled aluminium panels, with the exception of a single duct to the east, south and west elevations, clad with cement panels and serving as electrical risers. The podium's windows and doors comprise flush aluminium frames, mullions and transoms, set in deep reveals with horizontally-channelled aluminium cladding (Plate 5). The service ducts extend beyond the roofline; their sides are fitted with aluminium cladding to match that to the window reveals and they terminate with metal guard railing at their apex. The roof of the podium is flat and edged with tubular metal guard railings. Cement-rendered housing for cooling towers, with aluminium louvred panels and metal guard railings, occupies the centre of the roof and is set back from the roof edge. Various metal stairs and access ladders to the flat roof areas are visible. Two structures clad with concrete panels, housing lift motor rooms, project above the roofline on the north elevation; one is substantially larger and is located central to the junction with the structure linking the podium and tower.
- 5.3 The podium and tower are linked by a glazed structure of five storeys, which, on its eastern side, provides the principal access to the building via a pair of aluminium-framed double doors, emphasised by a long entrance canopy, running east – west, supported by four square-section metal posts with aluminium cladding (Plate 6). The roof of the link is flat and provides open-air access between the fifth floors of the podium and tower, enclosed by square-section metal guard railings.
- 5.4 The tower is of similar design, with horizontal bands of projecting concrete framing and recessed fenestration to the north and east elevations, punctuated by aluminium and concrete-clad service ducts. To the south elevation, the concrete framing of the east elevation wraps round to meet an off-centre, cement panel-clad, shallow-projecting lift tower which extends above the roofline, with continuous central aluminium-framed glazing. The roof of the lift tower is flat and edged with tubular metal guard railings. The remainder of this elevation, west of the lift tower, comprises aluminium-framed glazing. The west elevation has a central projecting stair tower with a central panel of full-height cement cladding flanked by continuous glazing. The glazing of the south elevation wraps around to meet the stair tower on its southern side. North of the stair tower, the elevation is effectively a continuation of the projecting concrete framing and recessed fenestration of the north elevation. Adjacent to the stair tower, four substantial concrete flues run up the exterior of the building, fixed intermittently with cast concrete bracket-like housing (Plate 7).
- 5.5 The fifteenth floor of the tower is clad with horizontal louvred panels and glazing, behind a continuous series of vertical aluminium 'fins'. The sixteenth floor is recessed from the main building line on the north, east and west sides and is clad with cement panels, giving a stepped effect in wider views.

Interior

- 5.6 Keybridge House is now largely a shell due to its decommissioning and the removal of the majority of its telephone exchange equipment. The construction throughout is generally concrete framing with concrete piers supporting the floors, clad with smooth plasterboard/asbestos panel wall finishes, suspended ceilings and vinyl tiled/carpeted floors. Unless otherwise stated, doors are flush timber doors with glazed vision panels, with metal doors to the integral electrical substations. Throughout the building are access doors to the numerous ducts which provide housing for services, including several marked AHU ('air handling units') which served the air conditioning system (Plate 8). The height of each floor is c. 5m to provide sufficient space for equipment and racking and to ensure sufficient ventilation. Because of the amount of electrical equipment in the building, an extensive cooling system was required as well as equipment for detecting smoke or heat increase. An air sampling system known as VESDA (very early smoke detection apparatus) was used. This featured battery backup in case of power failure (Brian Storer, pers. comm.) and units are visible throughout the building.
- 5.7 The tower houses a set of six lifts and a staircase on its southern side which, together with the adjacent lobby housed in the link between the tower and podium, forms the main circulation area. Due to the large footprint of the podium, a further five principal staircases are located on the north, east and west sides of the eastern portion and on the north and south sides of the western portion. The tower has an additional staircase housed in a projecting stair tower on its western side. The tower includes intermediate mezzanines above the eighth, tenth and twelfth floors which provided additional facilities including WCs and kitchen areas.

Ground floor (Fig. 3)

- 5.8 The principal entrance area to the building is housed within the link between the podium and tower, which serves as a reception area with reception desk on its western side. On the southern side, steps with a tubular chrome balustrade lead into a lobby providing access to the ground floor of the podium via an aluminium-framed glazed partition with double doors (Plate 9). To the north is a lobby extending into the tower, which provides lift access to the upper floor via six lifts (Plate 10). The lifts have polished steel doors and surrounds, and doors to cupboards on the north side of the lobby are constructed of an asbestos-based material clad with a timber veneer. Double flush timber doors provide access to WCs to the north and the tower staircase to the west. On the southern side of the lobby is an L-shaped conference room occupying the east side of the tower and overlooking the landscaped area east of the entrance.
- 5.9 The ground floor of the podium and tower are bisected by a ramp providing vehicular access to the basement from Miles Street, to the north. The podium area west of the ramp provided stores of customer equipment and stock for c. 3000 engineers (Brian Storer, pers. comm.). The main part of the stores is a

large open-plan room which formerly contained racks of shelves for tools and parts, now only evident as scars on the floor, with a timber counter at the northern end of the room (Plate 11).

- 5.10 East of the ramp, the ground floor comprises a series of rooms for switches, including a large L-shaped data centre occupying the northern end of the podium. The position of racks for switches is indicated by metal plates which cover holes in the floor for cables (Plate 12). Immediately south of the data centre is a linear room which contained the main distribution frame (MDF), located above the cable chamber in the basement, where cabling entered and exited the building (see Section 5.11). A linear feature in the floor, now covered with plywood boxing indicates the position where the cables entered the MDF (Plate 13). Four smaller rooms occupy the southern part of the ground floor, the north-west of which was formerly occupied by switches operating for Mastercard.
- 5.11 At ground floor level, the exterior yard areas contain a number of single storey structures built in dark engineering brick. These provide lock-up storage and three exit stairs from the basement and sub-basement, which are located at the north-east and south-west corners of the site and east of the vehicular entrance on the northern boundary. The exit stairs are constructed with curved brick walls (Plate 14).

Basement (Fig. 4)

- 5.12 The basement extends beneath the whole site and is accessed externally by a cast concrete vehicle ramp from the north side of the podium which runs southwards before turning east where it provides access to the sub-basement. It is also accessible internally via lifts and staircases. The majority of the basement is occupied by car parking and storage with subdivision of space by breezeblock partitions and metal storage compounds (Plate 15). Its walls, floor and ceiling are of concrete.
- 5.13 Of particular importance was the cable chamber, where the main cable entered the building from a ductway 3m below the ground on the eastern edge of the site. The cable chamber extends approximately 2.9m east, beyond the building line; this external area was blocked off from the remainder of the chamber by an inserted concrete wall to maintain BT access via an external manhole following the decommissioning of the building (Brian Storer, pers. comm.). The cable chamber has a concrete floor and ceiling supported by concrete downstands and is accessed via a wide doorway at its western end. Metal racks remain *in situ* at its eastern end (Plate 16).
- 5.14 North of the cable chamber, is a car parking area with lockable metal gates, which previously housed vehicles for outside broadcast (Brian Storer, pers. comm.)

Sub-Basement (Fig. 5)

- 5.15 Like the basement, the sub-basement extends beneath the whole of the site to a depth of -10m OD (Waterman 2013c). Its walls and ceiling are of concrete; floors are of concrete largely overlaid with small ceramic tiles.
- 5.16 The sub-basement comprises an extensive parking area on its eastern side, accessed via the ramp from the basement in the south-east corner, with water tanks and boiler rooms to the north, and oil tanks and generators on its western side. At the south-western corner is a void extending up through the basement to an external area at ground floor level which provided access to the basement for delivery and removal of generator engines; its ceiling is constructed with removal concrete beams and slab to allow access (Brian Storer, pers.comm.) (Plate 17).
- 5.17 Five generators to provide power back up remain *in situ* in the south-west corner of the basement, grouped east – west. Two of the original standby engines were replaced in 2007 with ‘DRUP’ engines, housed in soundproofed metal enclosures, which are located at the eastern end of the group (Plates 18 & 19). The remaining three standby engines are enclosed by lockable metal cages to restrict access (Plate 20). On the southern side of the engines are four start-up compressors. The engines are fuelled by diesel, one million litres of which was kept on site in tanks located in the north-west corner of the basement in a large oil tank room, and which would have been sufficient to provide power to the building for one month in the event of electrical power supply failure (Brian Storer, pers. comm.). The engines are vented via massive metal exhausts which run along the ceiling on the southern side before entering a duct on the western side of the car park which runs up through the podium, terminating at roof level (Plate 21).
- 5.18 Located between the generators and oil tank room is a series of rooms constructed with breezeblock walls and metal doors, which house electrical transformers for the mains power into the building.
- 5.19 The sub-basement is ventilated and cooled by a system comprising an air outlet with large extractor fans running along the eastern wall, and an air inlet on the southern side of the sub-basement which provides filtered cool air through metal louvres on the north side of the inlet, adjacent to the engine exhausts (Plates 22 & 23). This provides a flow of cool air south-east – north-west across the engines.

First floor (Fig. 6)

- 5.20 The first floor of the podium contains substations housing electrical transformers in the north-west corner, located off a corridor running south from the link with the tower, again constructed with breezeblock walls and metal doors (Plates 24 & 25). West of the corridor are offices, fitted out with lightweight stud partitions with high-level glazing, which most recently served as the Global Services NHS project office, from which a BT team managed a contract for the installation of NHS data, requiring a secure connection (Brian

Storer, pers. comm.). Toilet facilities were provided adjacent to the offices on their southern side. Further offices were located in the south-east corner of the floor. The remainder of the floor is occupied by former telex switch rooms (Plate 26).

- 5.21 The tower is occupied by a further GS NHS project office, subdivided by lightweight stud partitions with high-level glazing.

Second Floor (Fig. 7)

- 5.22 The second floor is laid out in a similar manner to the first floor, with substations housing electrical transformers in the north-east corner of the podium. An office which provided data security with particular reference to international traffic data (Brian Storer, pers. comm.), is sited in the south-western corner of the main part of the podium. The remainder of the first floor is subdivided into switch rooms by lightweight partitions with high level glazing. Those on the eastern side, south of the substation provided telex monitoring and transmission to other UK sites. West of the central corridor were two rooms known as 'bespoke rooms' which hosted equipment for international connections for data transmission on behalf of third parties who had sole access to the rooms – in this case the bespoke rooms were occupied by VISA. The western part of the podium was occupied by customer equipment racks for third parties including IBM, BBC and BskyB; hence, the second floor was known as the 'hosting floor' (Brian Storer, pers. comm.).

- 5.23 The second floor of the tower contains a series of BT offices formed by lightweight partitions with glazed panels (Plates 27 & 28).

Third Floor (Fig. 8)

- 5.24 The third floor of the podium is subdivided along the same lines as the second floor, with a substation at the north-east corner and the remainder of the floor being subdivided by lightweight partitions. The floor contained the global services switch for international data transmission. The tower contains offices previously occupied by Openreach.

Fourth Floor (Fig. 9)

- 5.25 The fourth floor of the podium is arranged with offices in the north-east corner, the remainder being occupied by rooms for the BT conferencing switch for audio calls, packet switching equipment (allowing different speeds of data to communicate) an international mobile CCIT7 signalling switch and AXE10 international switch. The western part of the podium floor was occupied by Ericsson switches, which were a type of early time division switch. The tower provided offices for Outside Broadcast.

Fifth Floor (Fig. 10)

- 5.26 The fifth floor of the podium houses air conditioning/chilling plant. Metal ducts are carried at high level supported on metal framing set on concrete pad-

stones (Plate 29). Partitions are of solid rendered brick and breezeblock construction. The construction of the roof of the podium is visible internally and comprises a series of shallow pyramidal frames covered with cast concrete panels (Plate 30). Access is afforded from both the podium and tower to the asphalt-covered flat roof of the link building via single doors which effectively provides an open-air bridge between the two structures. The fifth floor of the tower housed offices for Openreach.

Sixth Floor (Fig. 11)

- 5.27 The podium roof houses a cooling tower for the air conditioning/chilling plant on the fifth floor. Again, the tower houses offices, formed by lightweight partitions with high-level glazing (Plate 31). The offices in the north-west corner of the building were occupied by the Metropolitan police for the storage of data collection equipment, and surveillance, given its position which provided a good vantage point over the MI6 building to the north.

Seventh Floor (Fig. 12)

- 5.28 The seventh floor of the tower was occupied by offices and stores for Openreach and BT Global Services, arranged around the perimeter of the tower, accessed via a corridor from the eastern side of the lift lobby, running along the east, north and west sides and enclosing a large central room lit by glazing on its northern side. As elsewhere, these are formed of lightweight partitions with high-level glazing.

Eighth & Ninth Floors (Figs. 13 & 14)

- 5.29 The eighth and ninth floors of the tower hosted switch equipment using a copper network for O2, the only equipment outside the podium. Both floors are laid out with large switchrooms on the northern side of the tower (Plate 32), with the space to either side of the lift lobby subdivided into smaller rooms.

Tenth Floor (Fig. 15)

- 5.30 The tenth floor of the tower was occupied by store rooms and workshops, and is subdivided by lightweight partitions with high-level glazing. It is laid out around a corridor aligned east-west, accessed from the north side of the lift lobby. At the eastern end are a series of large open-plan rooms; the north-west part of the floor is subdivided to provide a series of smaller office/workshop cubicles (Plate 33).

Eleventh Floor (Fig. 16)

- 5.31 The eleventh floor of the tower was occupied by offices for BT Global Services' Account Managers, and staff redeployment. It predominantly comprises a large, open-plan office occupying the central and western portion of the tower, north of the lift lobby (Plate 34), with smaller offices and WCs sited on the eastern and southern sides.

Twelfth Floor (Fig. 17)

- 5.32 The twelfth floor of the tower originally provided a welfare area comprising a games room and pub, although no evidence for this former function was visible at the time of the survey, the rooms being typical of the general character of the tower (Plate 35). Pubs were a facility of all telephone exchanges (Brian Storer, pers. comm.).

Thirteenth Floor (Fig. 18)

- 5.33 The thirteenth floor of the tower provided a rest area and bistro; a 'BISTRO' sign remains *in situ* above the main entrance to the floor from the lift lobby (Plate 36). A tiled canteen servery with timber rolling shutters is located on the east side of the floor, with metal and timber barriers to facilitate queueing. The remainder of the bistro is subdivided with timber screens and a series of timber seating booths at the east and west ends (Plates 37 & 38).

Fourteenth Floor (Fig. 19)

- 5.34 The fourteenth floor of the tower served as an L-shaped canteen (Plate 39). The floor is laid with parquet-effect vinyl and a canteen servery/vending area is located at the eastern end. The room has full-height windows maximising extensive views to the north, south and west (Plate 40).

Fifteenth & Sixteenth Floors (Figs. 20 & 21)

- 5.35 The fifteenth floor of the tower houses ventilation plant, whilst the sixteenth floor, which has a smaller footprint, contains motors for the tower lifts. These floors were inaccessible at the time of the survey due to the presence of nesting peregrine falcons.

Roof (Fig. 22)

- 5.36 Ten 18 gigabit dishes (aerials) are fitted to the tower roof. These provided network diversity by allowing microwave transmission which gave backup to the cable network and also served international third party customers.

Memorial

- 5.37 A memorial in the small garden north-east of Keybridge House commemorates four members of staff of Brand & Co, whose factory formerly occupied the site, who were killed by a German high explosive bomb on 27th September 1940 (Plate 41).

6.0 DISCUSSION

- 6.1 Keybridge House is an example of a purpose-built telephone exchange constructed in the mid-1970s, designed by the architects G.W. Mills & Associates.
- 6.2 Nikolaus Pevsner described Keybridge House as ‘a forbiddingly huge telecommunications centre’ and the dominant building on the west side of South Lambeth Road (Pevsner & Cherry 1983). Built in the brutalist style, its massive scale and the use of cast concrete and glass in its construction are in stark contrast to the domestic-scale brick buildings of the immediate surroundings and are reflective of it being a robust structure purpose-built to house the specialist equipment of a telephone exchange. The building’s relatively simple, functional form is enriched by the aluminium-clad service ducts and external concrete exhaust flues, which break up the elevations, and serve a visual as well as a functional role. The large areas of glazing to the south and west sides of the tower echo the unadorned ‘glass-box’ style of skyscraper which had become typical of office buildings by the late 1960s (Curtis 1982).
- 6.3 The character of the building’s interior is rather homogenous and reflects the fact that there was little demarcation amongst employees working in the building (Brian Storer, pers. comm.). Although the vast amounts of equipment and cabling which once occupied the building have been removed, the surviving electrical substations and transformers, backup generators and cooling systems serve to give an impression of the infrastructure required to operate a building of this type.

7.0 REFERENCES

BT. 2010. *Archives Information: Keybridge House*.

CgMs Consulting. 2015. *Keybridge House, 80 South Lambeth Road, London SW8: Written Scheme of Investigation for Historic Building Recording*.

Curtis, W.J.R. 1982. *Modern Architecture since 1900*. Phaidon Press Ltd.

English Heritage. 2006. *Understanding historic buildings: A guide to good recording practice*.

Grace’s Guide, British Industrial History. *Brand & Co*.
http://www.gracesguide.co.uk/Brand_and_Co
Accessed: 14th April 2015

Lambeth Council *Conservation Area Profiles - Vauxhall*
<http://www.lambeth.gov.uk/planning-and-building-control/building-conservation/conservation-area-profiles-guide?page=2#vauxhall>
Accessed: 14th April 2015

Pevsner, N. & Cherry, B. 1983. *The Buildings of England. London 2: South*.
Yale University Press.

Waterman Energy Environment & Design Limited. 2013a. *Keybridge House
Environmental Statement volume 1: Main Text. Chapter 13: Cultural Heritage*

Waterman Energy Environment & Design Limited. 2013b. *Keybridge House
Environmental Statement volume 2: Figures. Chapter 13: Cultural Heritage*

Waterman Energy Environment & Design Limited. 2013c. *Keybridge House
Environmental Statement volume 5: Appendices. Appendix 13.1: Heritage
Desk-Based Assessment*

8.0 DEPOSITION OF THE ARCHIVE

A full archive intended for deposition with the London Archaeological Archive and Research Centre (LAARC) has been prepared. The archive has been assigned the site code SLH15. The full site archive will be prepared in accordance with the LAARC guidelines *General Standards for the Preparation of Archaeological Archives Deposited with the Museum of London* (Museum of London 1999). The archive will comprise a hard copy of the full report, a pdf version of the report on CD, the full photographic record with registers, field notes and drawings.

9.0 ACKNOWLEDGEMENTS

Archaeology South-East would like to thank CgMs for commissioning this Historic Building Record, staff of Mount Anvil and Keybridge House for facilitating access to the building, and Mr Brian Storer of BT Group Property, Operational Building Vacations, for providing comprehensive information regarding the historic background to Keybridge House and its use, and a tour of the building.

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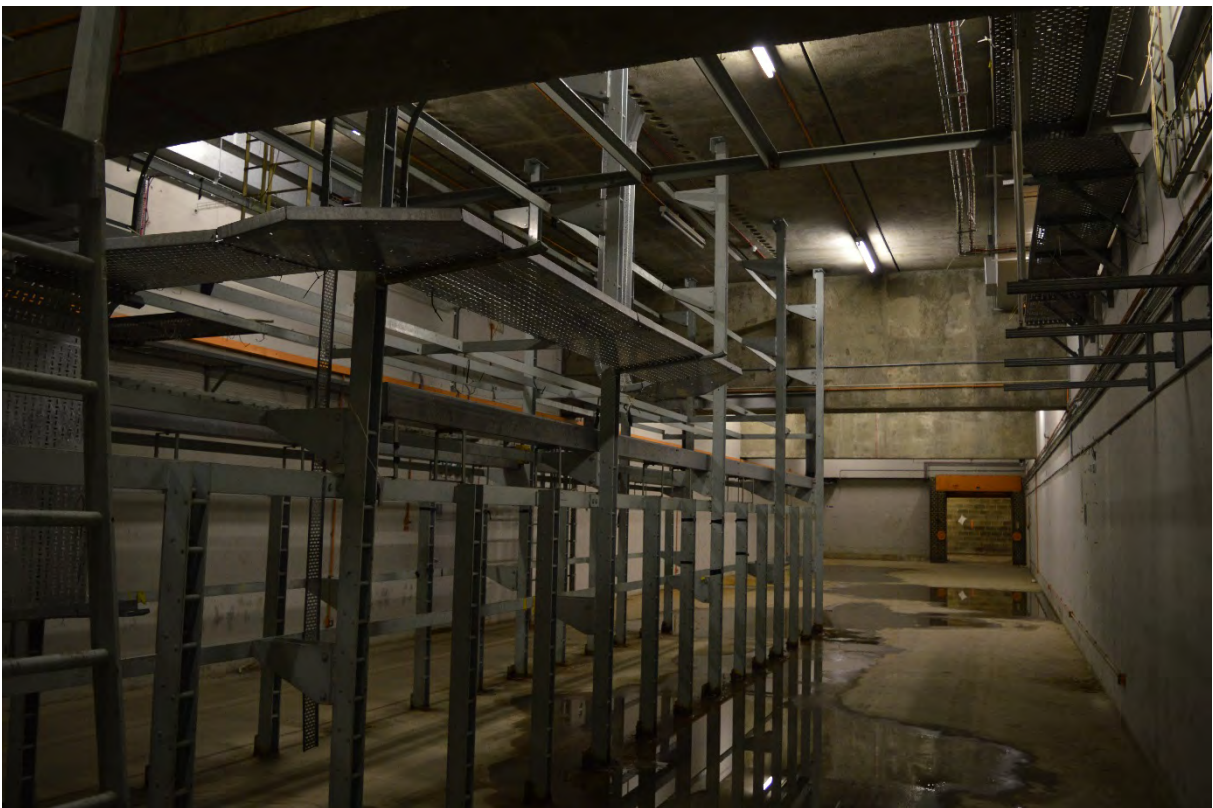


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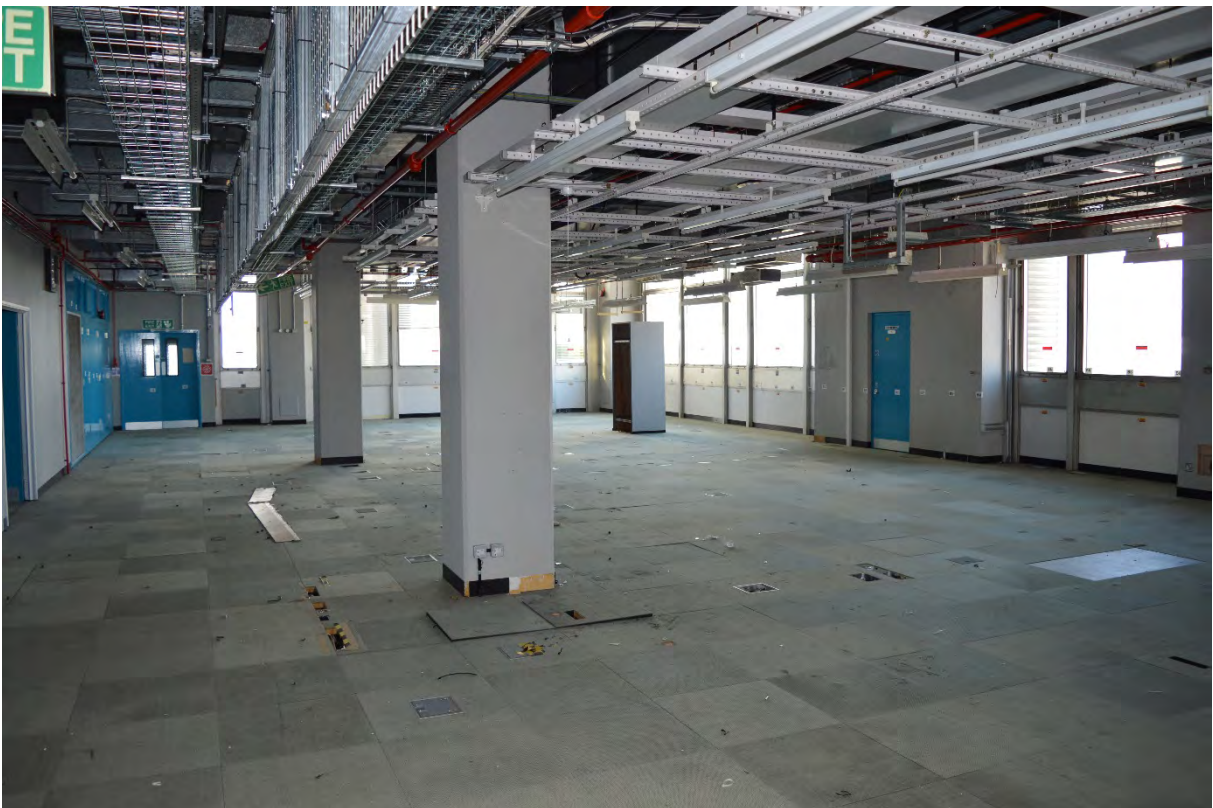


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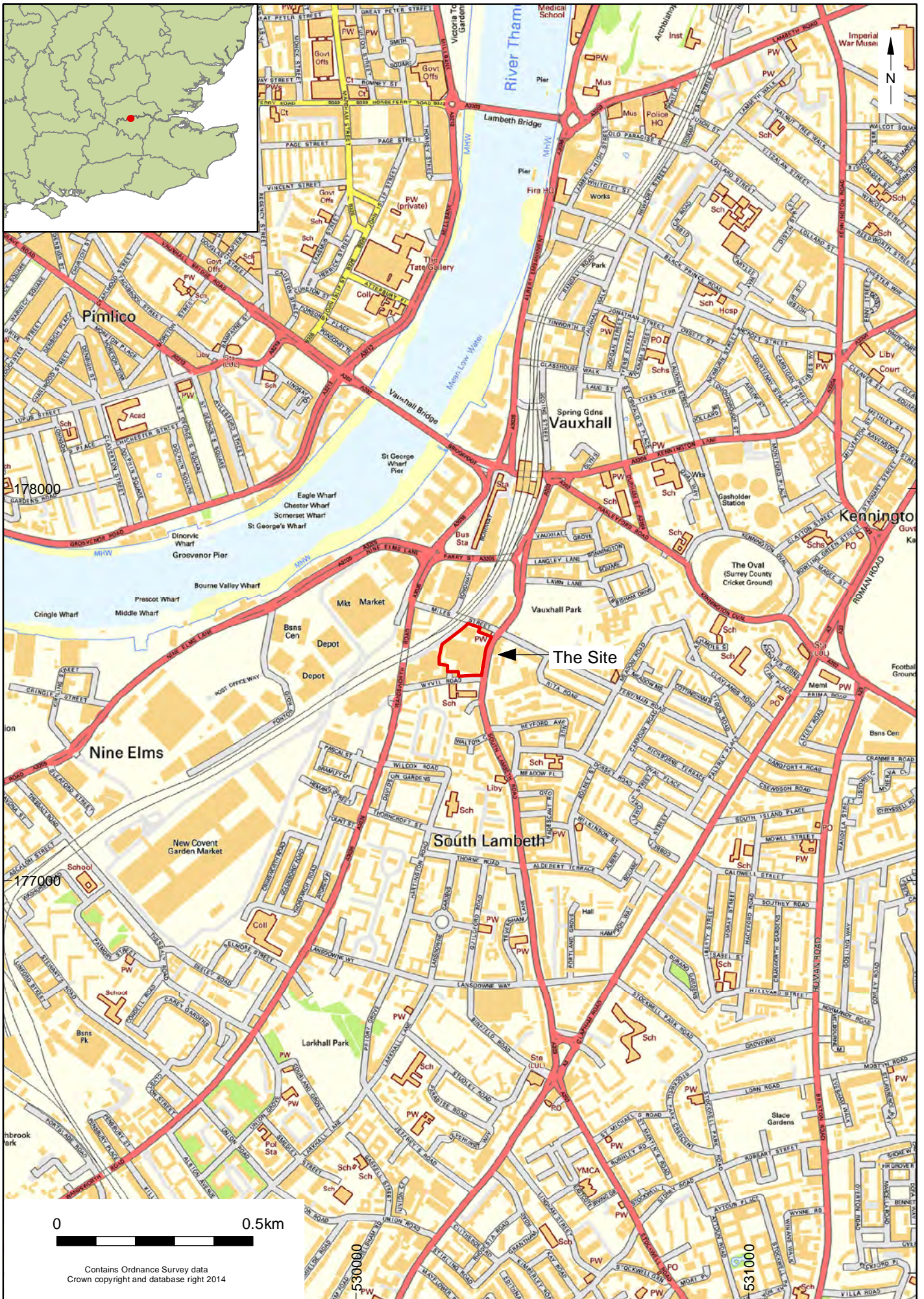
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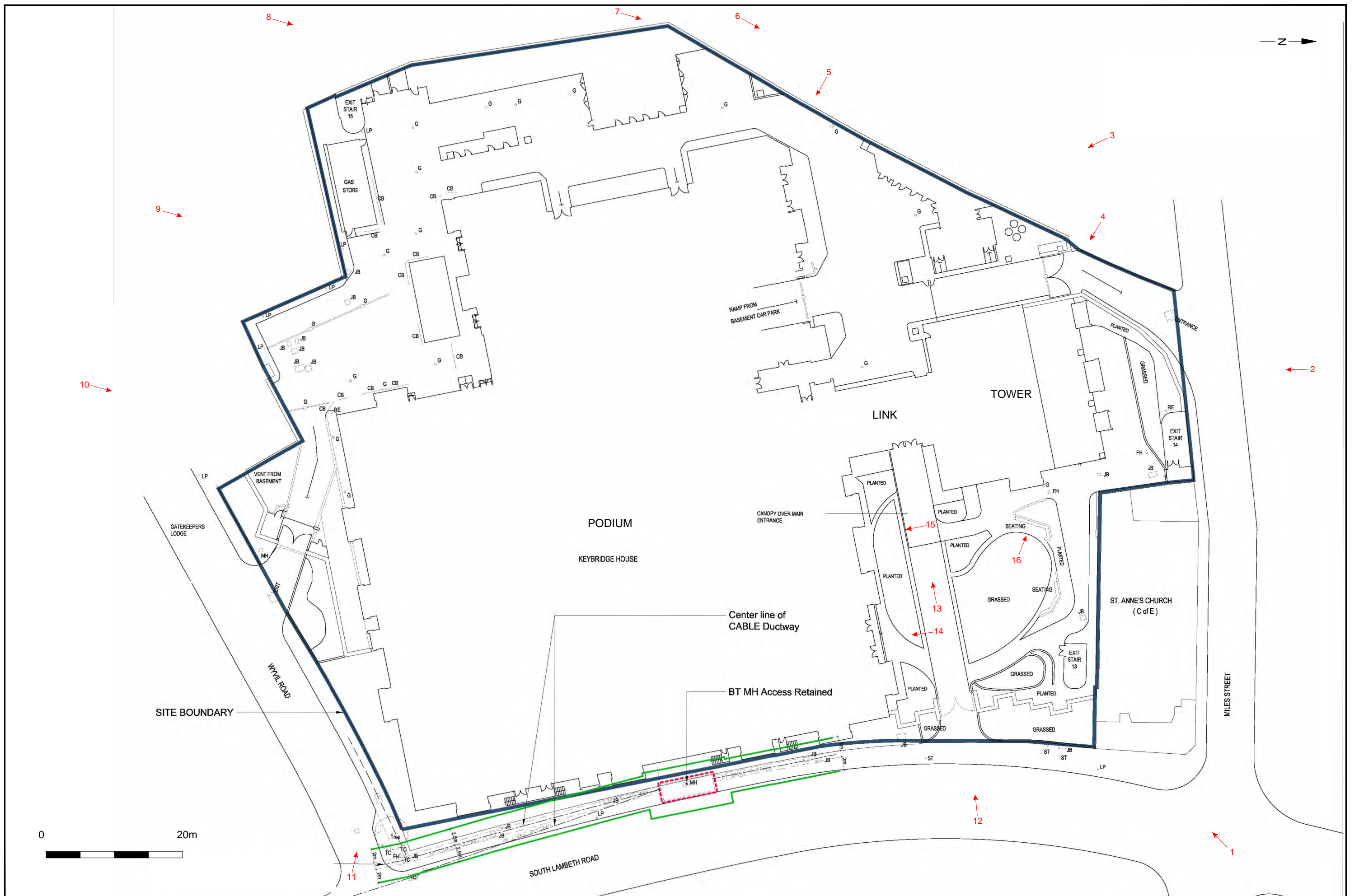
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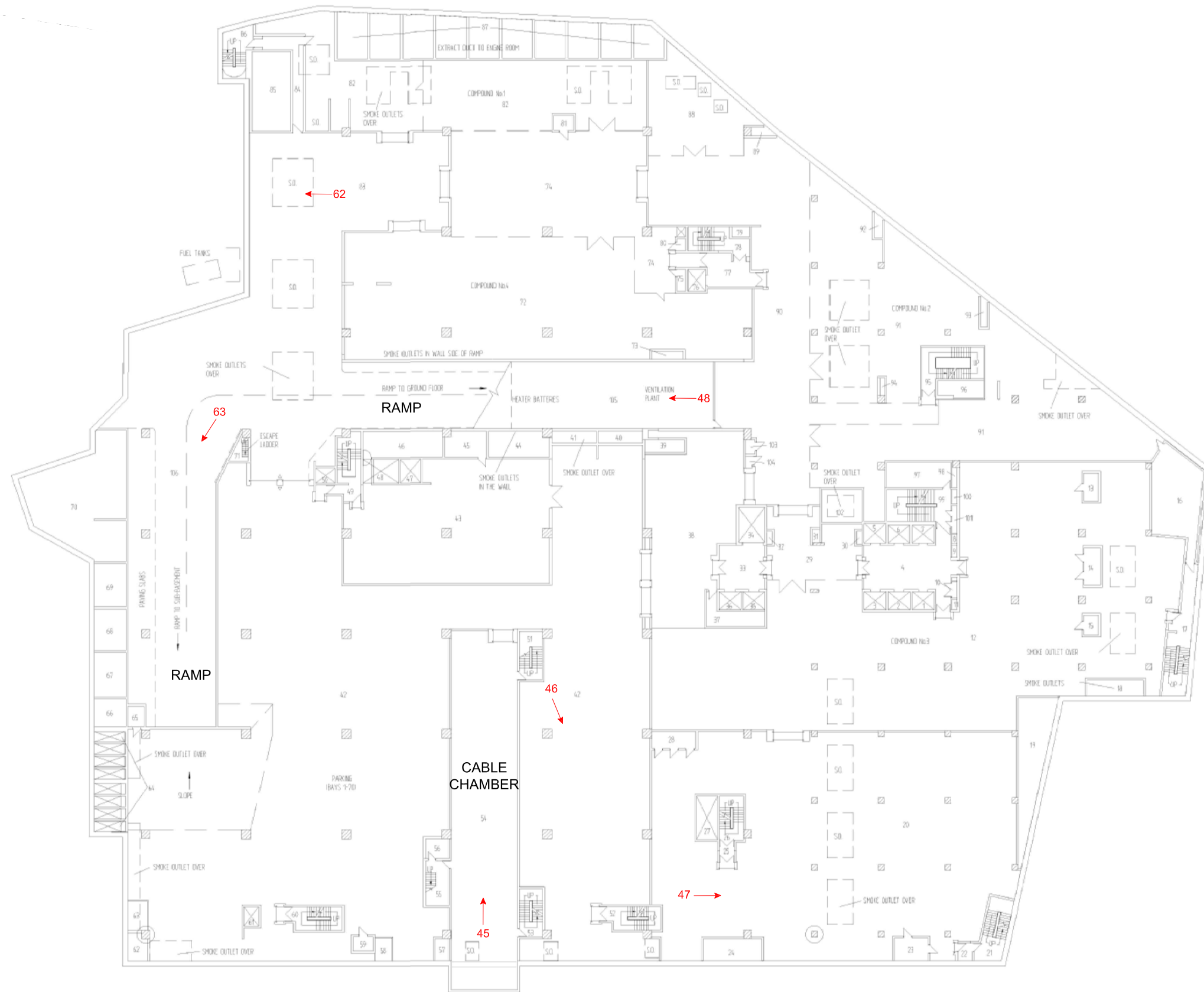
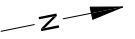
© Archaeology South-East		Keybridge House, Lambeth		Fig. 1
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Report Ref: 2015101	Drawn by: HG			



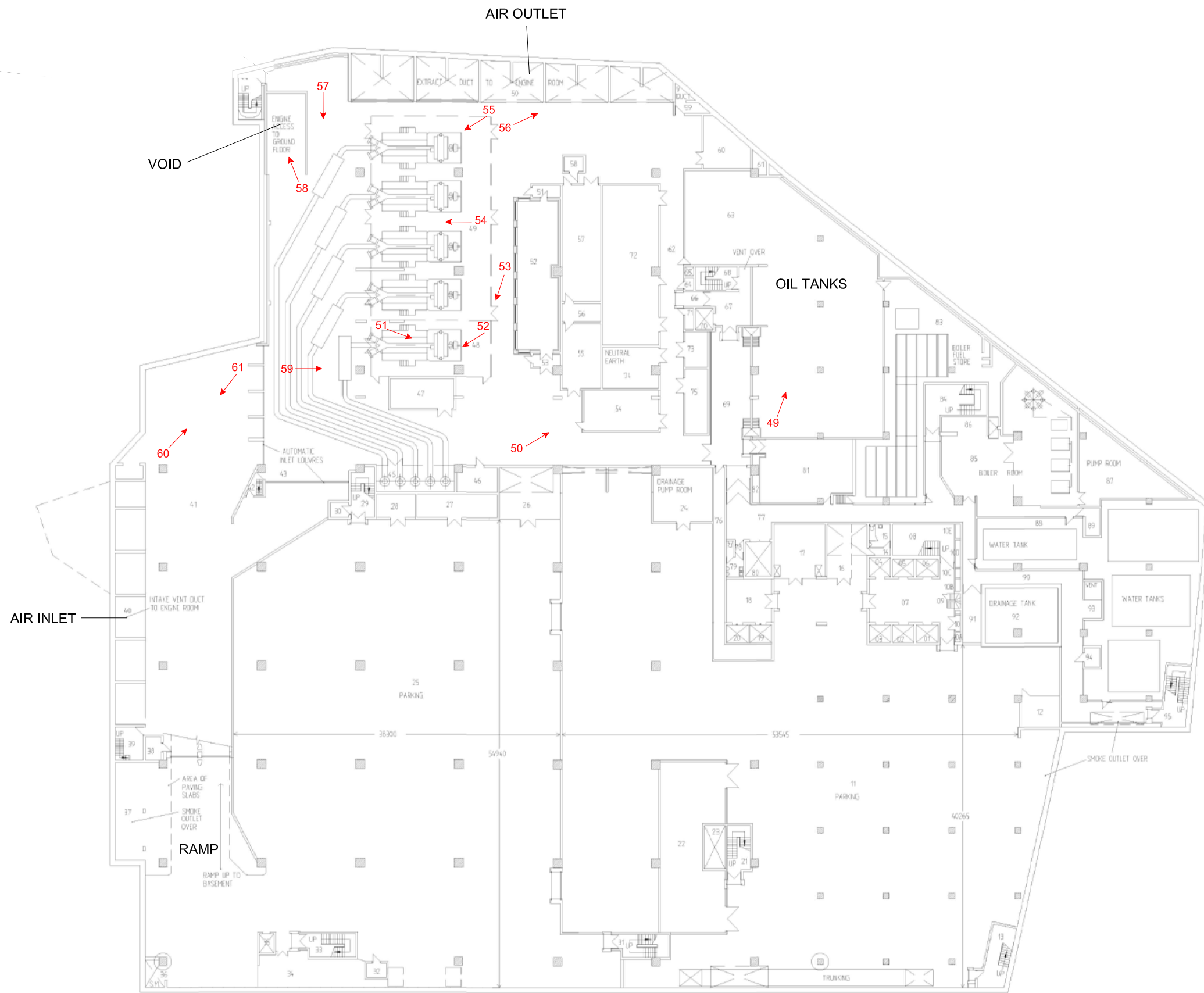
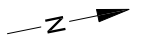
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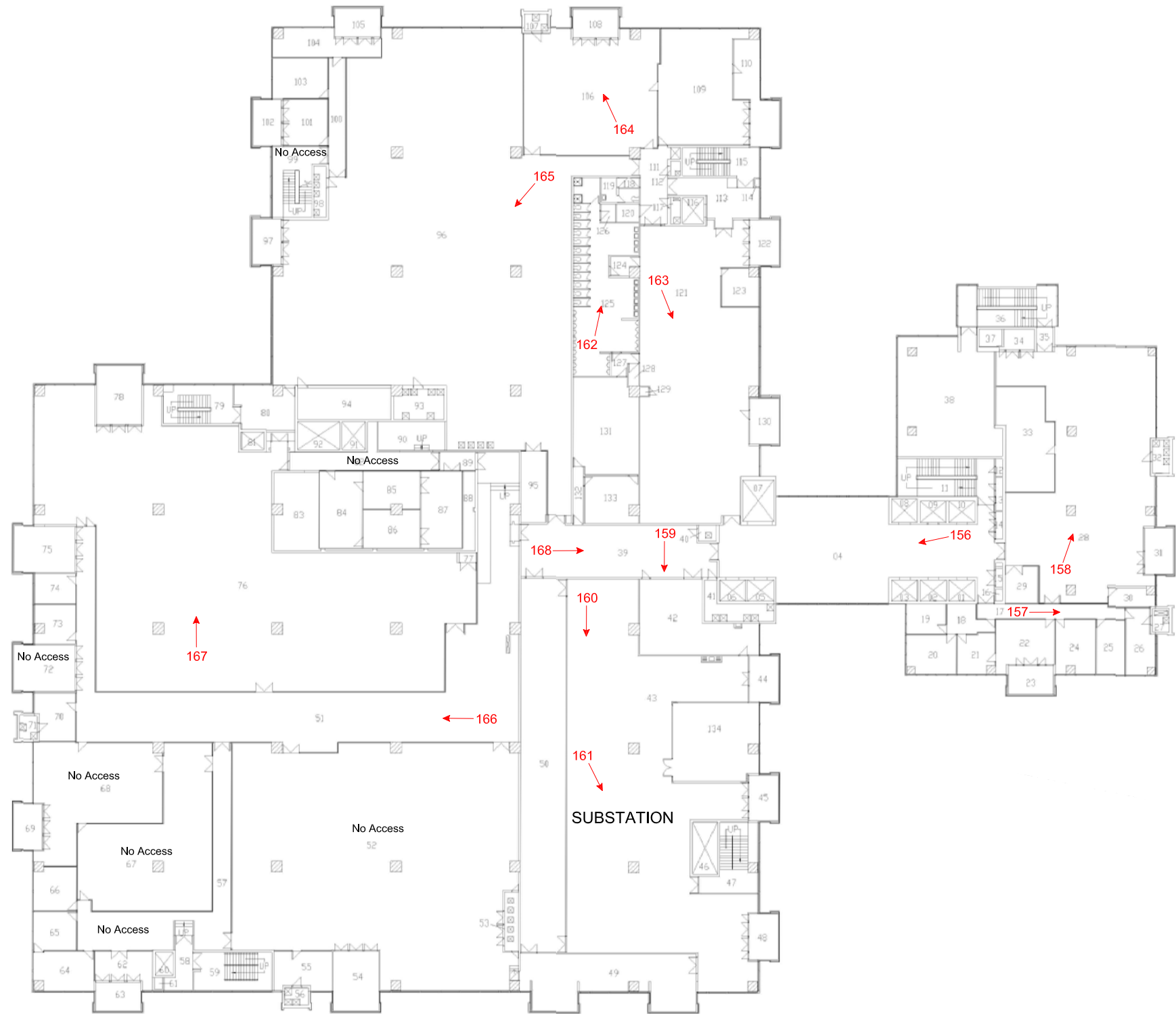
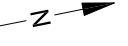


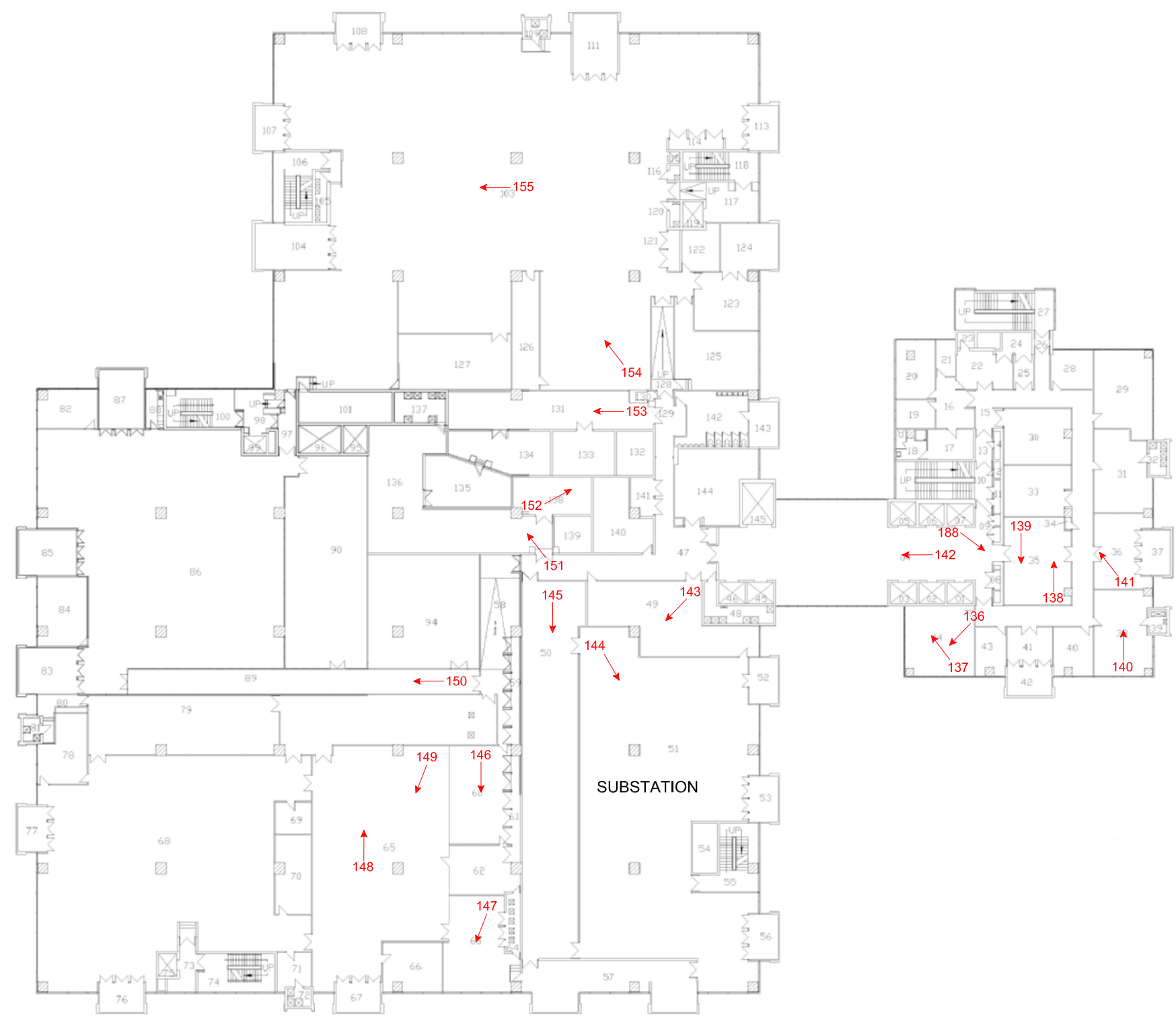
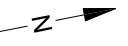
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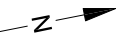


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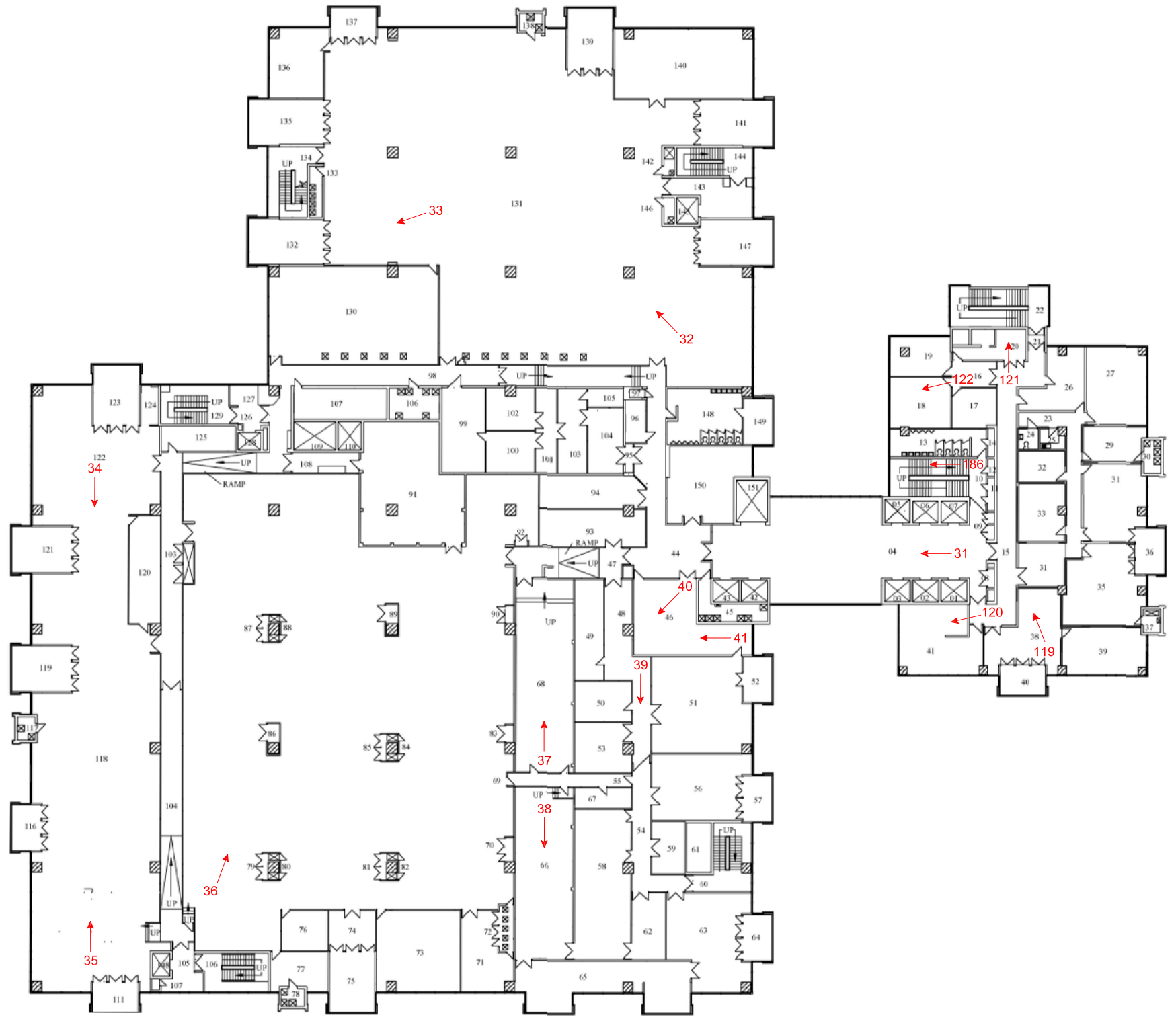
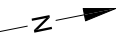




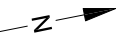




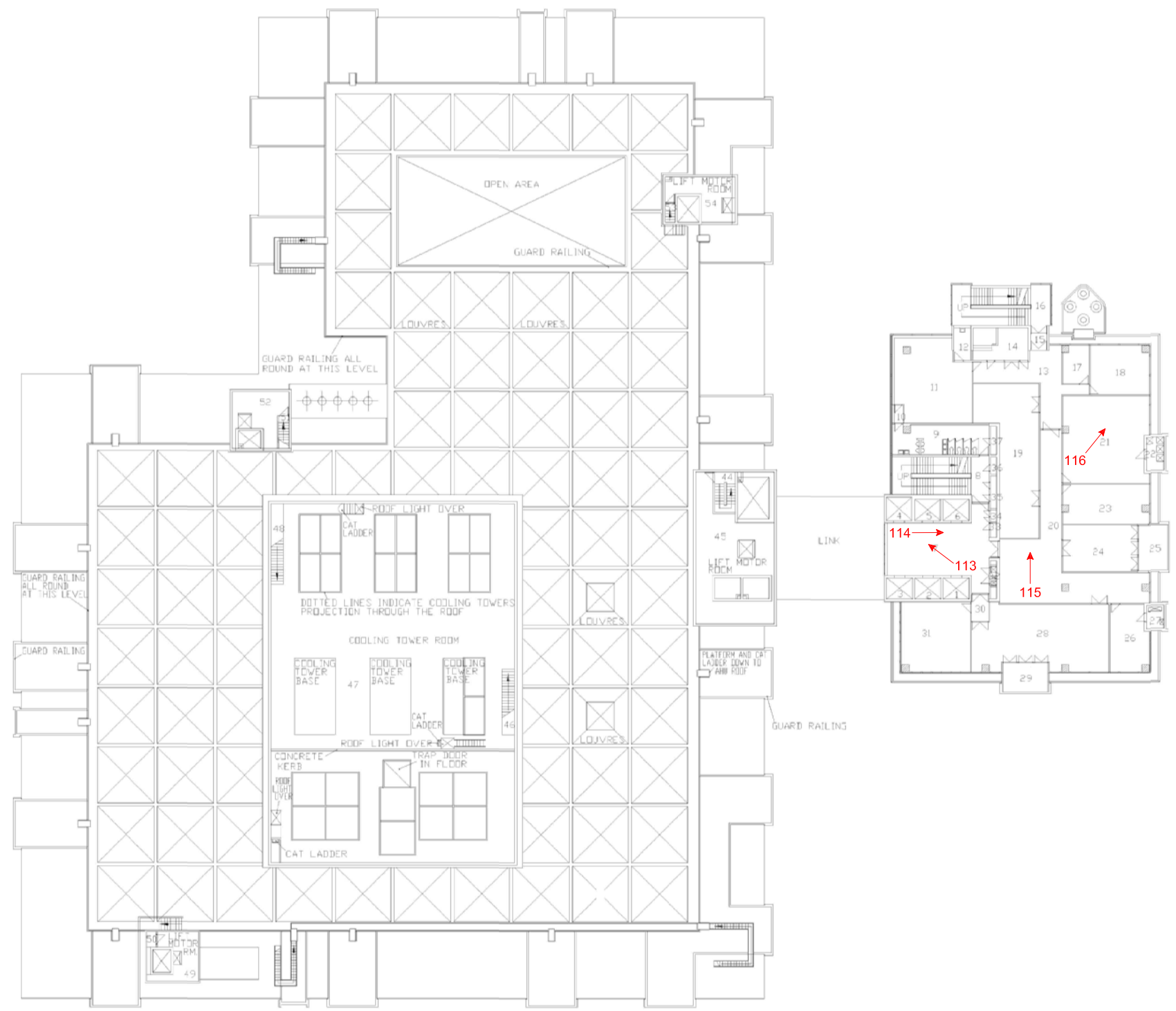
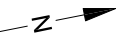
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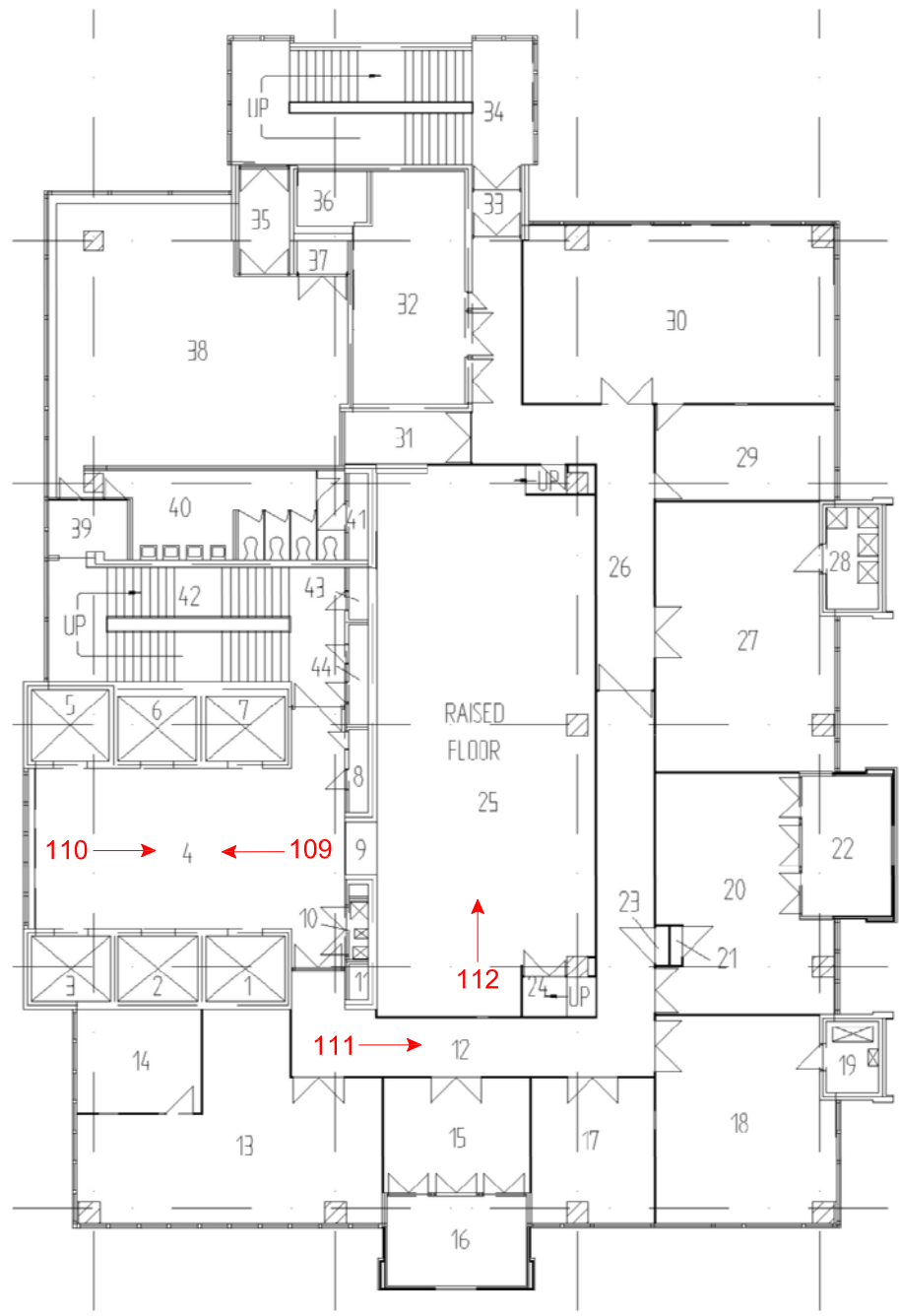
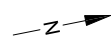


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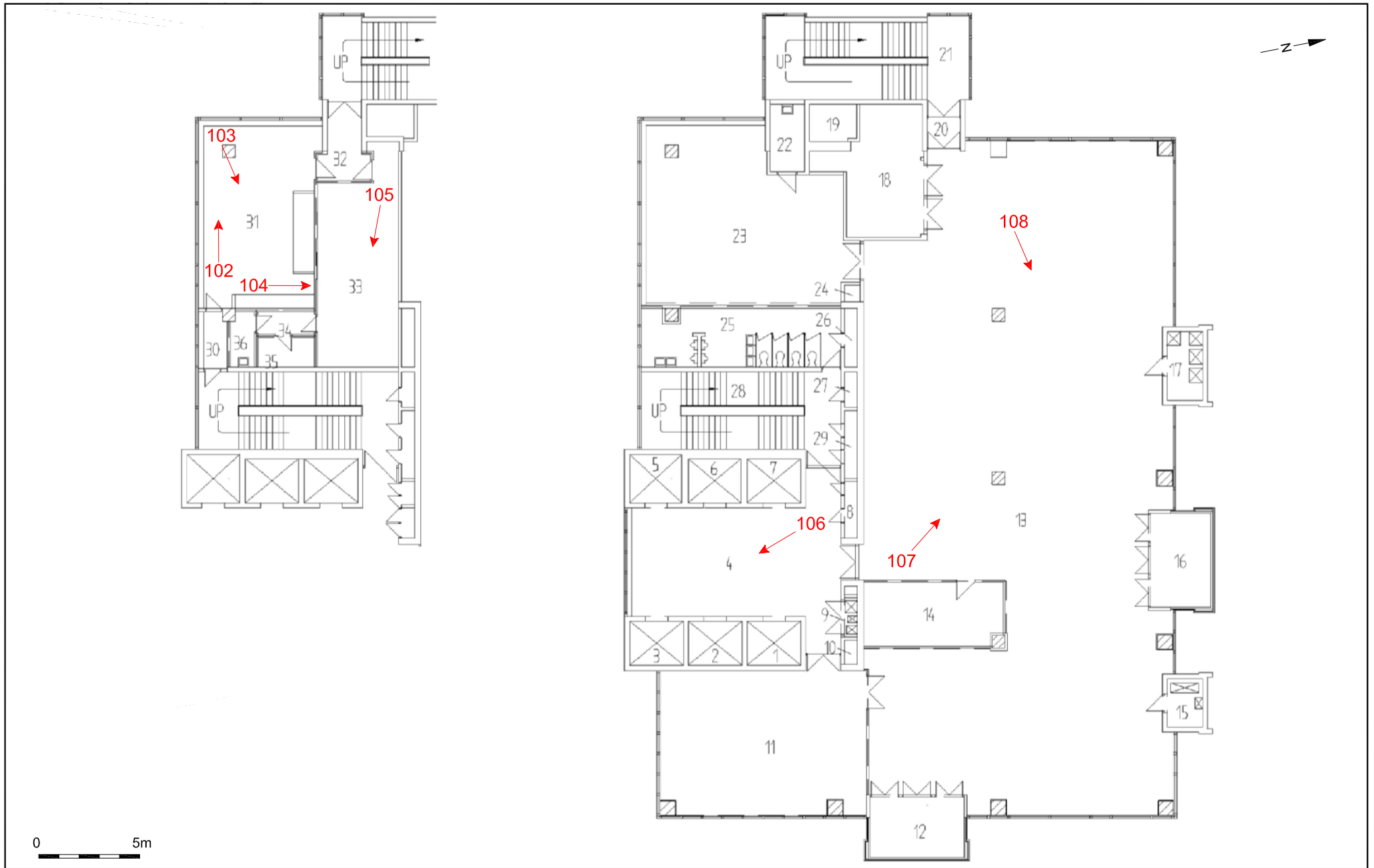
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Report Ref: 2015101	Drawn by: HG		



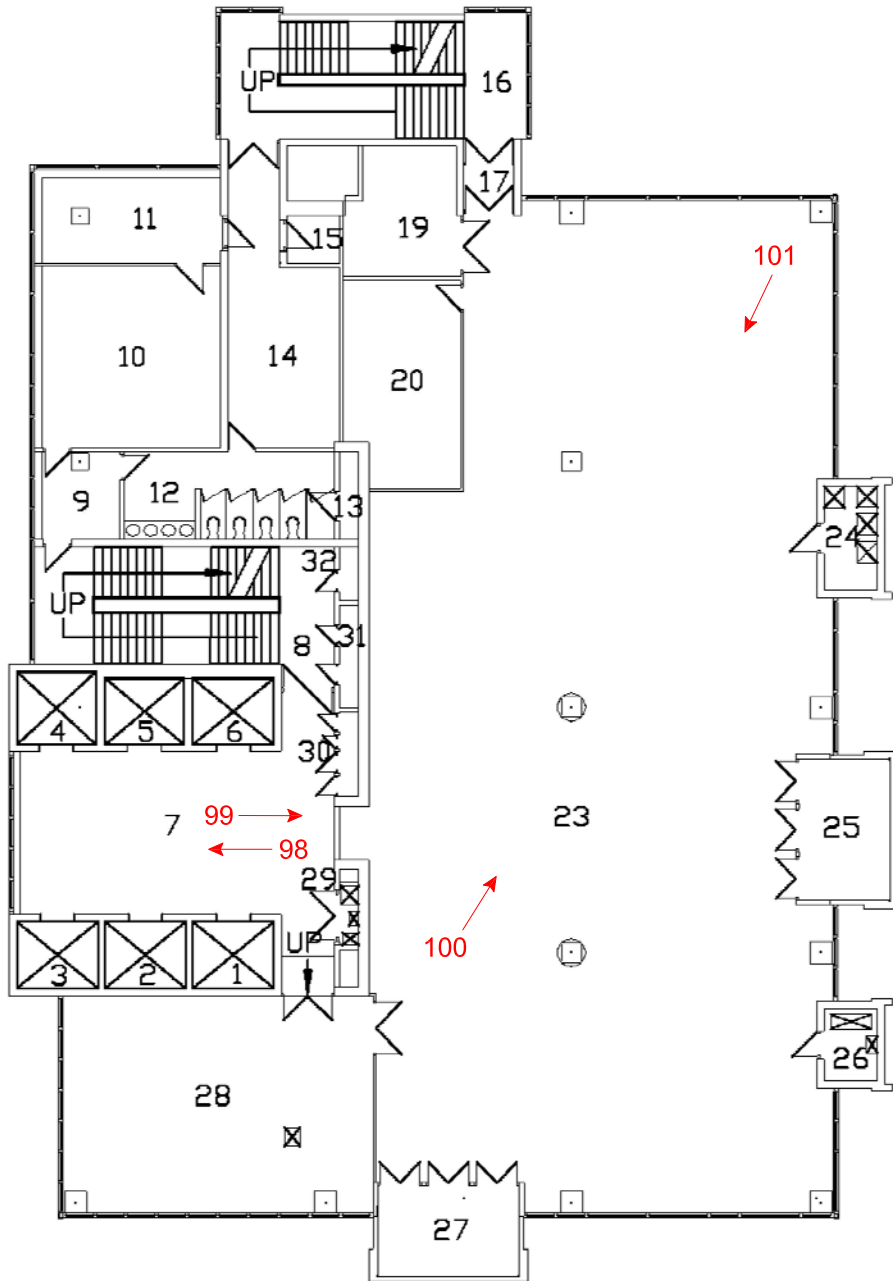
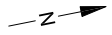


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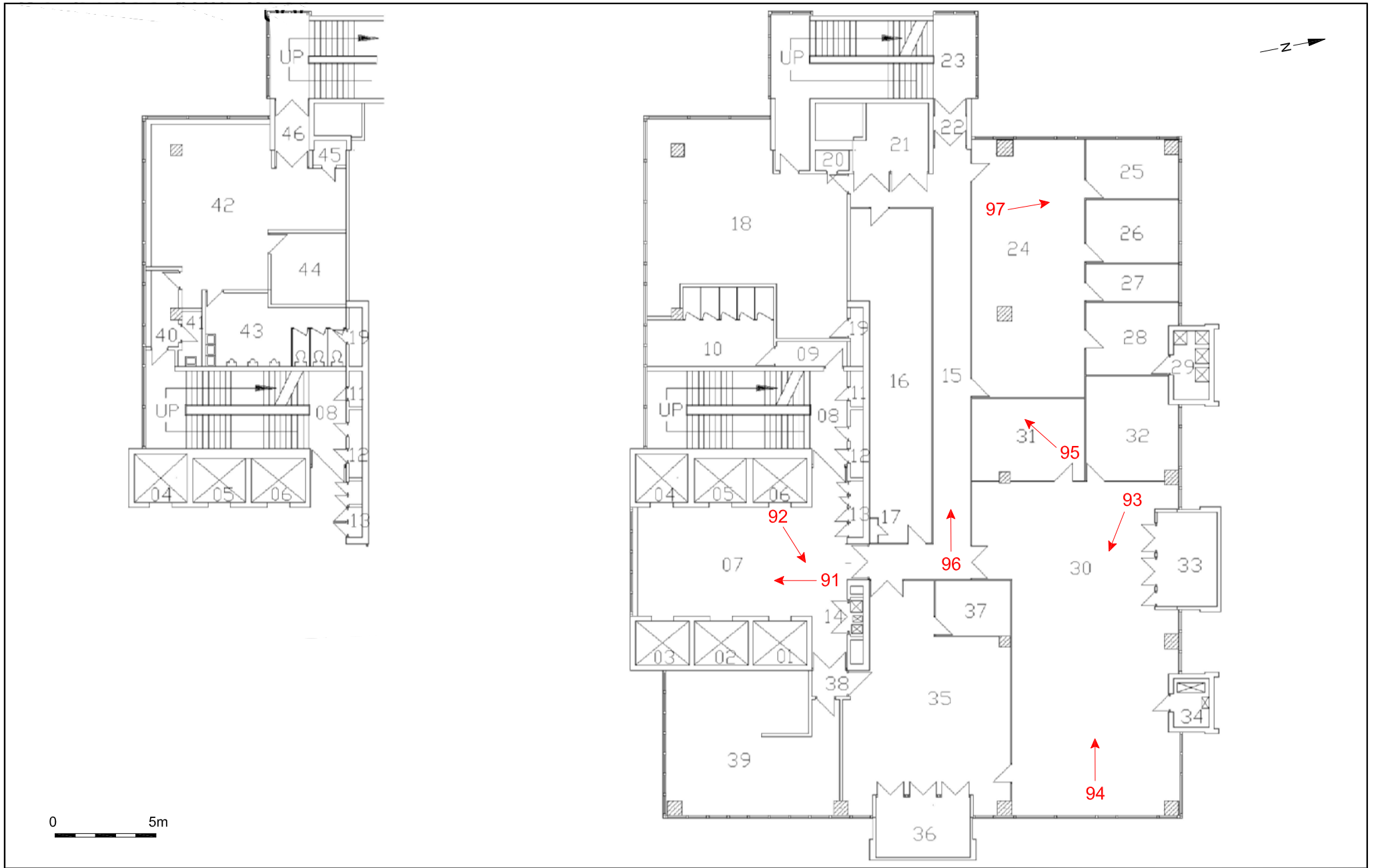
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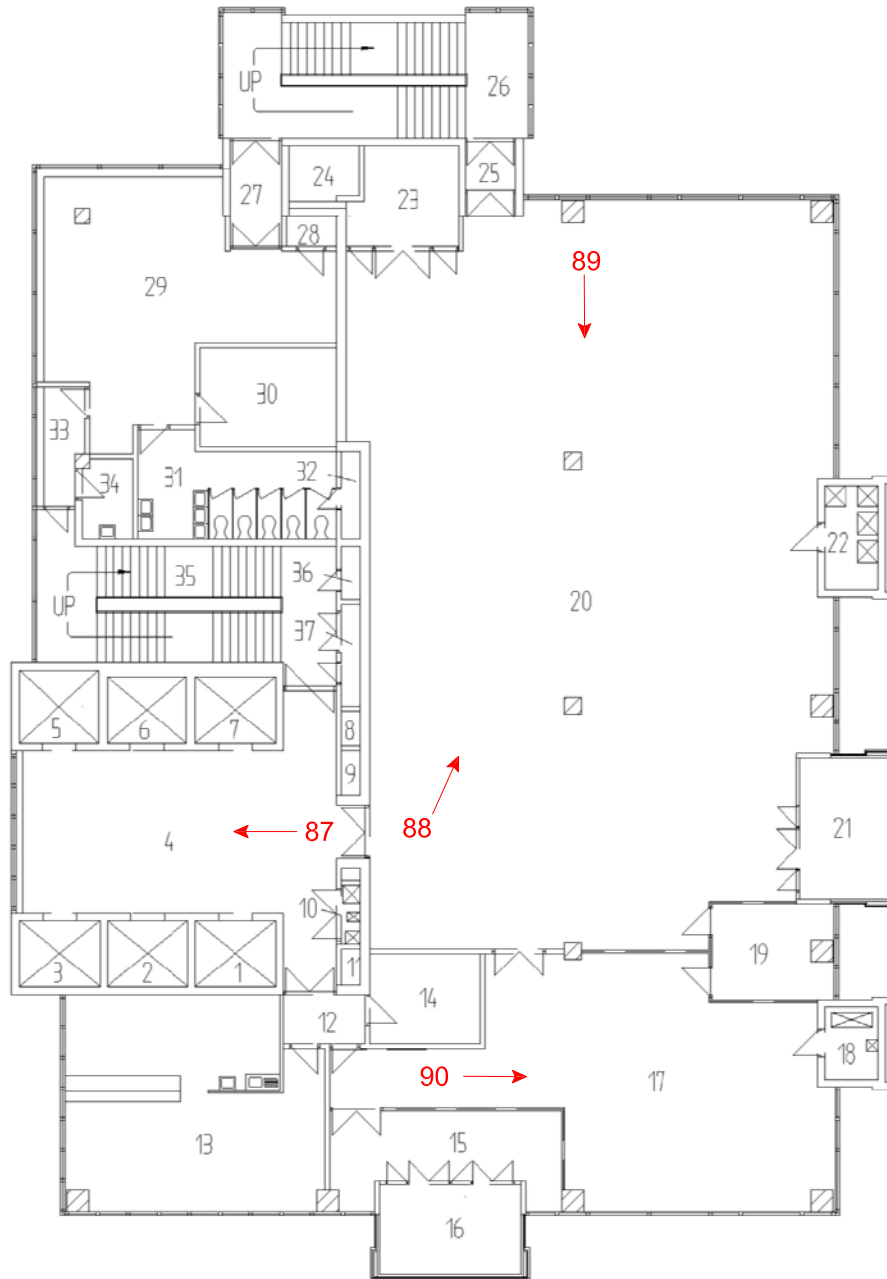
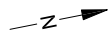
© Archaeology South-East		Keybridge House, Lambeth		Fig. 13
Project Ref: 7128	April 2015	8th Floor & Mezzanine Plan and Photo Locations (Tower)		
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© Archaeology South-East		Keybridge House, Lambeth	Fig. 14
Project Ref: 7128	April 2015	9th Floor Plan and Photo Locations (Tower)	
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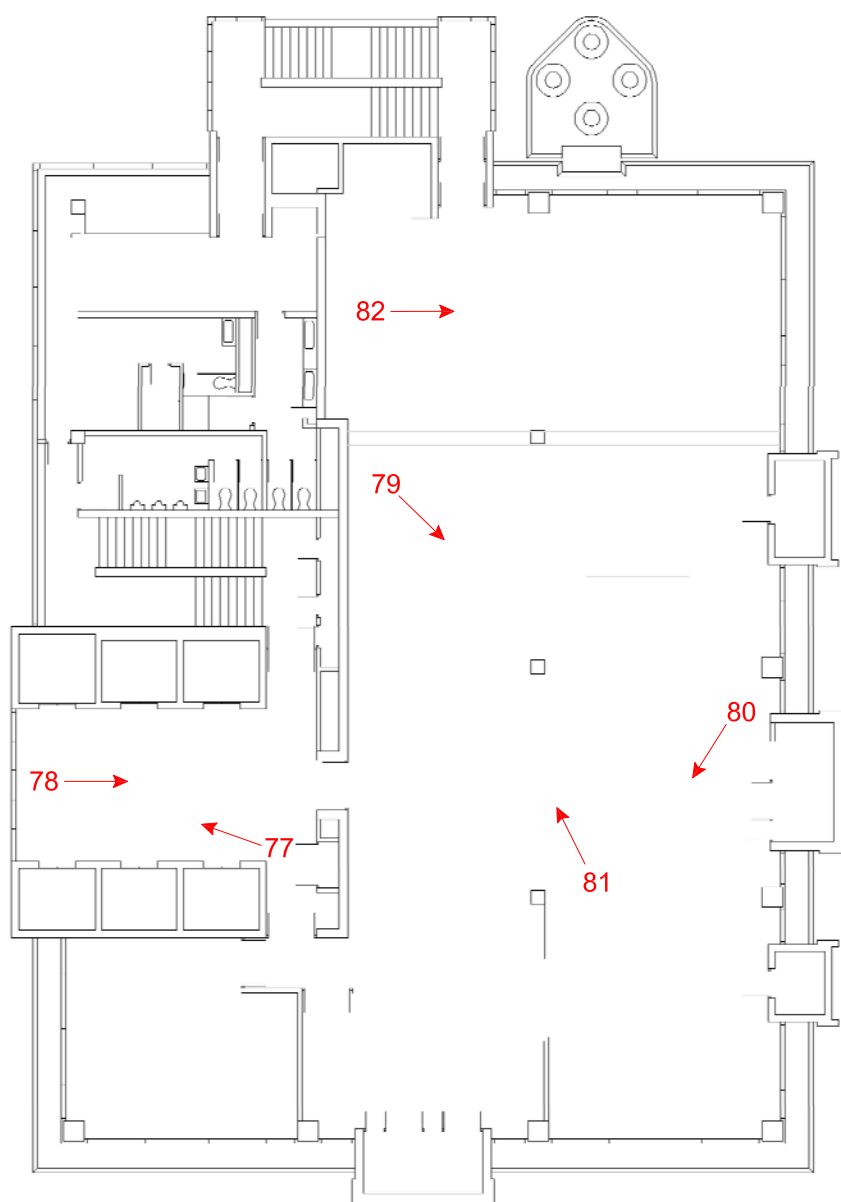
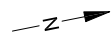


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© Archaeology South-East		Keybridge House, Lambeth	Fig. 16
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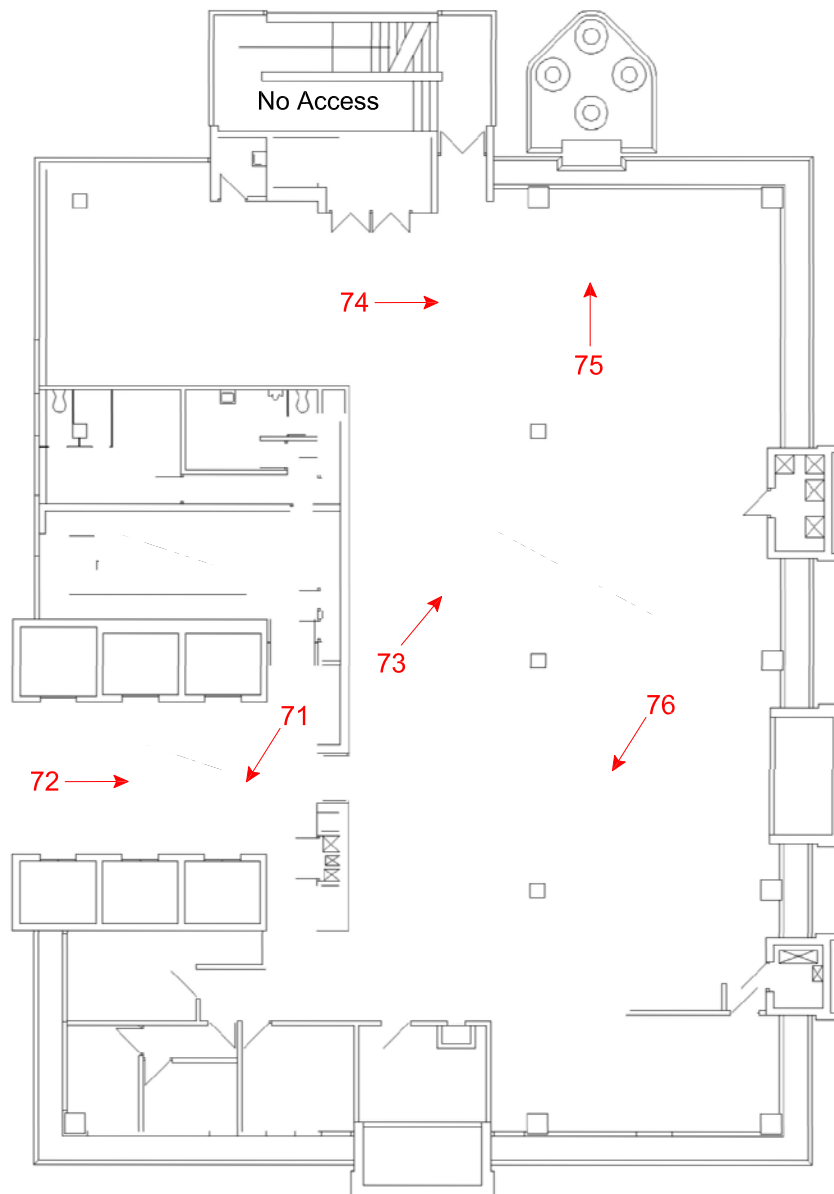
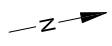


© Archaeology South-East		Keybridge House, Lambeth		Fig. 17
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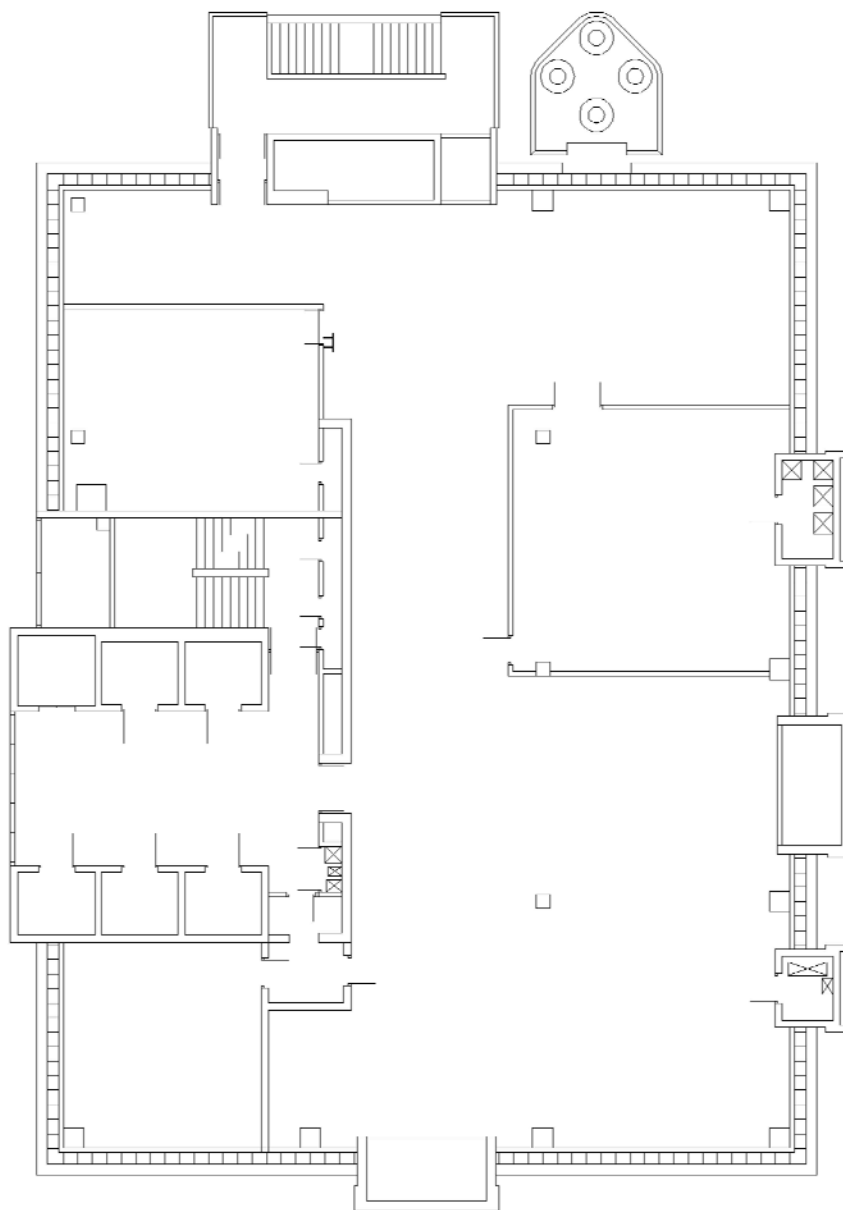
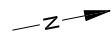
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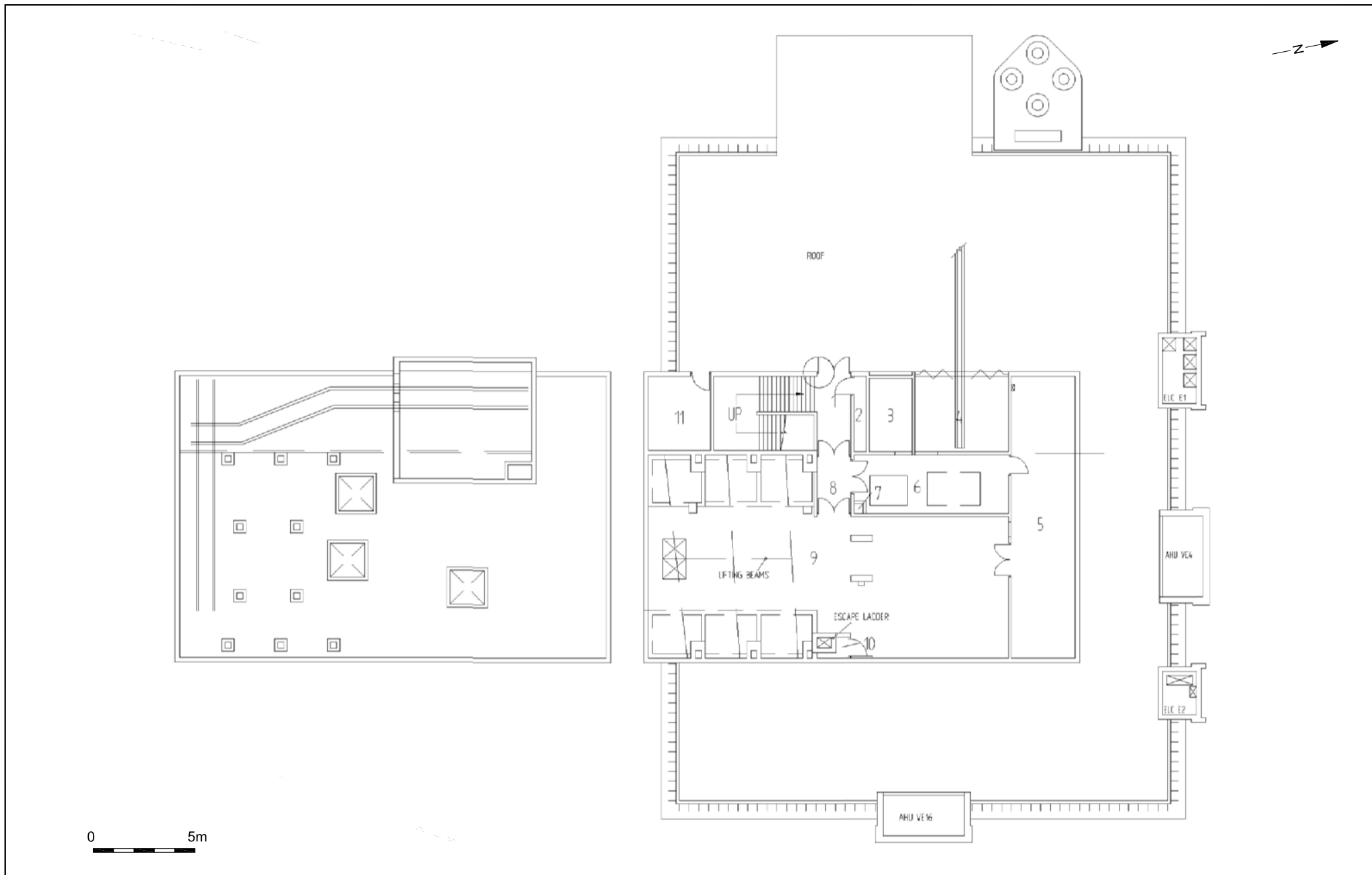
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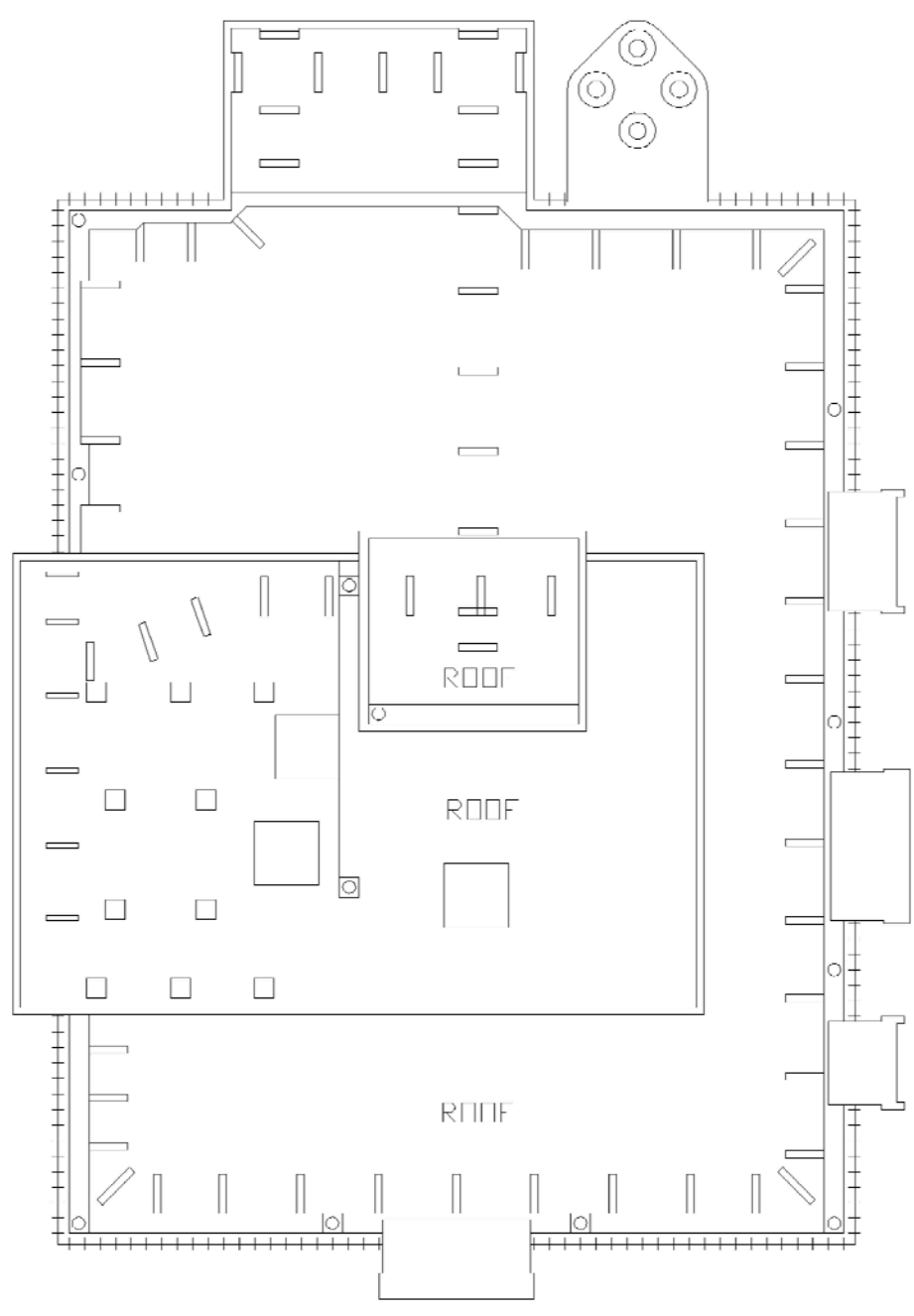
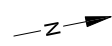


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© Archaeology South-East		Keybridge House, Lambeth	Fig. 20
Project Ref: 7128	April 2015	15th Floor Plan (Tower) [No Access]	
Report Ref: 2015101	Drawn by: HG		



© Archaeology South-East		Keybridge House, Lambeth	Fig. 21
Project Ref: 7128	April 2015	16th Floor & Mezzanine Plan (Tower) [No Access]	
Report Ref: 2015101	Drawn by: HG		



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© Archaeology South-East		Keybridge House, Lambeth	Fig. 22
Project Ref: 7128	April 2015	Tower Roof Plan [No Access]	
Report Ref: 2015101	Drawn by: HG		

APPENDIX 1: OASIS Data Collection Form

OASIS ID: archaeol6-209200

Project details

Project name	KEYBRIDGE HOUSE, 80 SOUTH LAMBETH ROAD, LONDON BOROUGH OF LAMBETH
Short description of the project	In March 2015 Archaeology South-East (a division of the Centre for Applied Archaeology, UCL) carried out a programme of historic building recording of Keybridge House, 80 South Lambeth Road, London (NGR: 530280 177580). The work was commissioned by CgMs Consulting in order to fulfil a condition placed on planning permission for the redevelopment of the site (Ref. 13/03935/OUT). Keybridge House is a recently-decommissioned telephone exchange, which was purpose-built for international Telex and completed in 1977. The building was designed by the architects G.W. Mills and Associates. By 1984 the world's largest digital international exchange was operating at Keybridge House. The building was recorded to English Heritage Level 2.
Project dates	Start: 26-03-2015 End: 26-03-2015
Previous/future work	Yes / Yes
Any associated project reference codes	7128 - Contracting Unit No.
Type of project	Building Recording
Site status	None
Current Land use	Other 2 - In use as a building
Monument type	TELEPHONE EXCHANGE Modern
Monument type	OFFICE Modern
Significant Finds	NONE None
Methods & techniques	"Photographic Survey", "Survey/Recording Of Fabric/Structure"
Prompt	National Planning Policy Framework - NPPF

Project location

Country	England
Site location	GREATER LONDON LAMBETH LAMBETH KEYBRIDGE HOUSE, 80 SOUTH LAMBETH ROAD
Postcode	SW8 1RG
Study area	12980.00 Square metres
Site coordinates	TQ 530280 177580 50.9383583477 0.178264395804 50 56 18 N 000

10 41 E Point

Project creators

Name of Organisation	Archaeology South-East
Project brief originator	CgMs Consulting
Project design originator	Archaeology South-East
Project director/manager	Ron Humphrey/Amy Williamson
Project supervisor	Katya Harrow
Type of sponsor/funding body	private client

Project archives

Physical Archive Exists?	No
Digital Archive recipient	LAARC
Digital Archive ID	SLH15
Digital Media available	"Images raster / digital photography","Text"
Paper Archive recipient	LAARC
Paper Archive ID	SLH15
Paper Media available	"Notebook - Excavation',' Research',' General Notes","Photograph","Plan","Report"

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	KEYBRIDGE HOUSE, 80 SOUTH LAMBETH ROAD, LONDON BOROUGH OF LAMBETH
Author(s)/Editor(s)	Harrow, K.
Other bibliographic details	2015101
Date	2015

Issuer or publisher Archaeology South-East

Place of issue or
publication Archaeology South-East

Entered by Katya Harrow (k.harrow@ucl.ac.uk)

Entered on 17 April 2015

Appendix 2 Index of Digital Photographs



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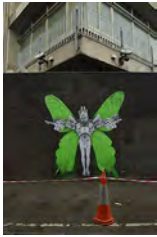
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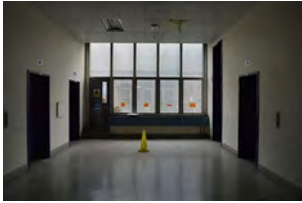
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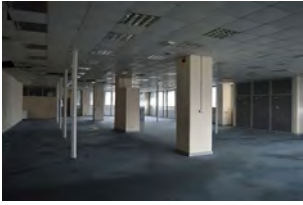
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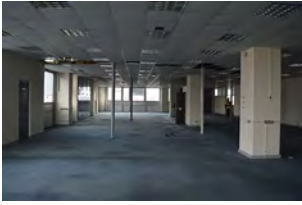
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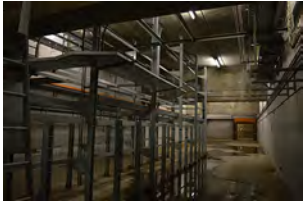
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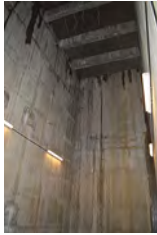
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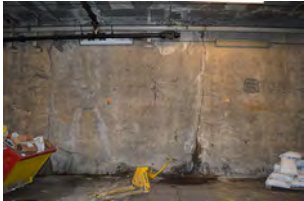
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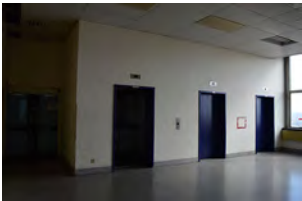
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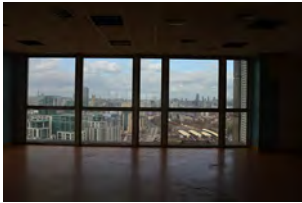


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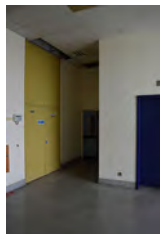
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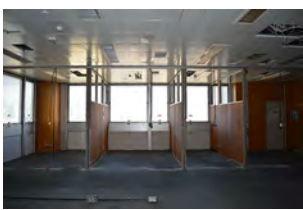


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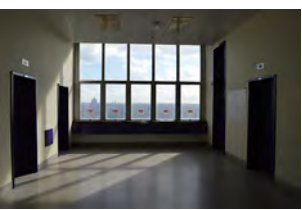


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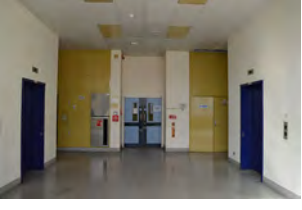
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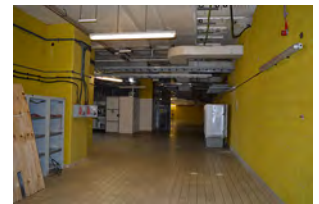
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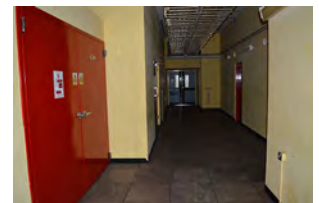
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7128 (132)



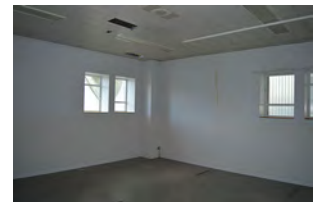
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7128 (138)



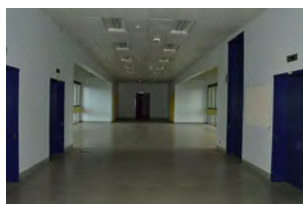
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7128 (143)



7128 (144)

Appendix 2 Index of Digital Photographs



7128 (145)



7128 (146)



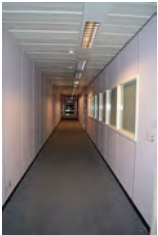
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7128 (153)



7128 (154)



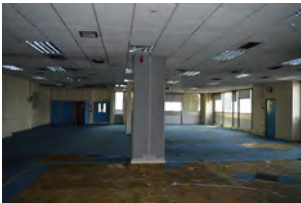
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7128 (168)

Appendix 2 Index of Digital Photographs



7128 (169)



7128 (170)



7128 (171)



7128 (172)



7128 (173)



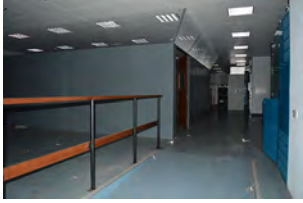
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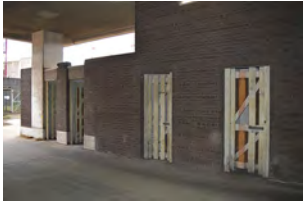
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7128 (187)



7128 (188)

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