

THE

ARCHITECTURE OF DEMOCRACY

DP3: ANALYSIS & PROPOSAL

LAURENCE ELSDON M. ARCH DESIGN THESIS **RELOCATING THE HOUSE OF COMMONS**

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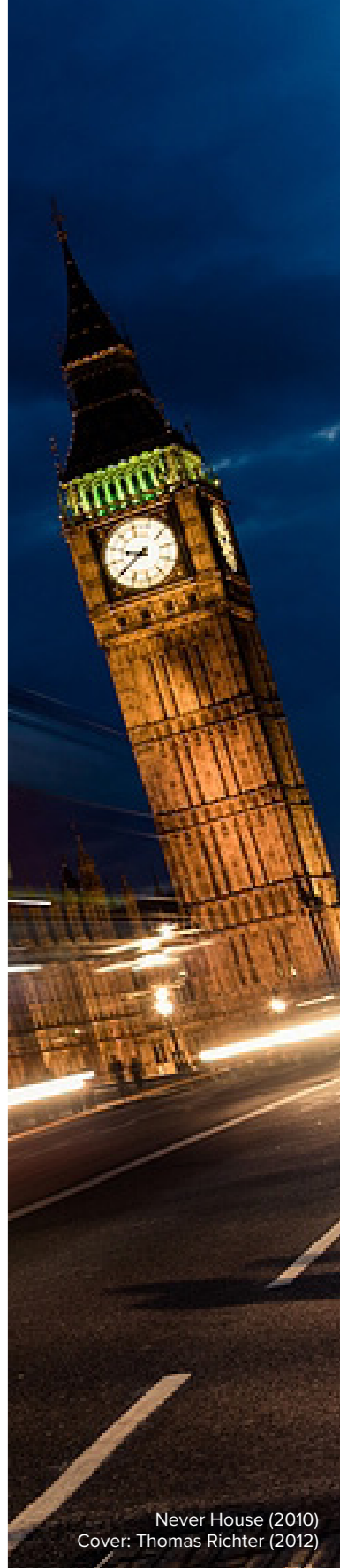
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PARLIAMENT
**COMMONS, LORDS AND
THE PARLIAMENTARY
ESTATE**

05 House of Commons

650 elected members

The House of Commons is formed of 650 Ministers of Parliament, each elected to represent their constituency. The chamber is laid out in an oppositional layout with the government and opposition on opposite sides, two sword lengths apart. “Inside the debating chambers, the big issues are discussed, new laws agreed, and the Prime Minister is questioned.” Future Learn (2016a)



UK Parliament (2008a)



Catherine Bebbington (2010)

06 House of Lords

810 appointed lords

The Lords role is to check and challenge the work of the government and in addition they assist with making and shaping laws.

The majority of the Lords are life peers appointed by the Monarch on advice of the Prime Minister or the House of Lords Appointment Commission. They are ceremonially referred to as the Peers and “are appointed for their knowledge and experience. There is no political party with overall control in the Lords and many of its members, the crossbenchers and the bishops, are non-party political.”

Future Learn (2016a)



UK Parliament (1999)



UK Parliament (2008c)



UK Parliament (2008b)

07 The Monarch

The Monarch's Role

The role of the Monarch within Parliament is mainly ceremonial these days. She is present for the state opening of Parliament and it is her responsibility to sign every new law, however, for the most part the monarch and the royal family remain politically neutral.



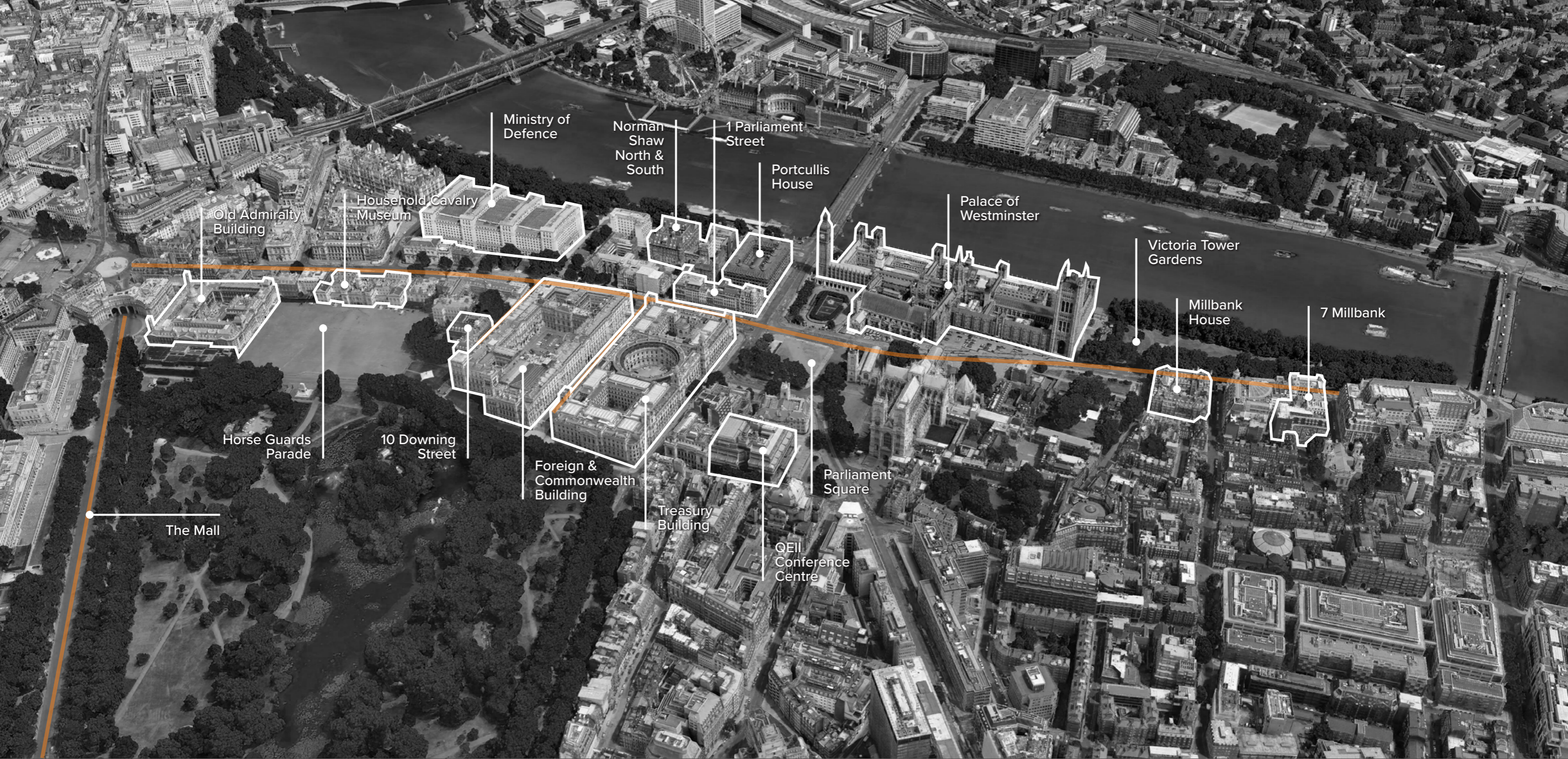
08 Commons, Lords & Joint Committees

A large part of Commons & Lords work takes place in committees

“Made up of MPs or Lords. These committees consider policy issues, scrutinise the work and expenditure of the government, and examine proposals for primary and secondary legislation. Select committees operate largely by an investigative process, while legislative committees operate mainly by debate.”

UK Parliament (n.d.-a)





Parliamentary Estate

Whitehall, London

10 Parliamentary Estate

Norman Shaw North

House of Commons

MPs 102

MP Staff 267

House Staff 45

Norman Shaw South

House of Commons

MPs 43

MP Staff 145

Portcullis House

House of Commons

MPs 208

MP Staff 405

Palace of Westminster

House of Commons

MPs 233

MP Staff 288

House Staff 276

1 Parliament Street

House of Commons

MPs 59

MP Staff 125

7 Millbank

House of Commons

House Staff 613

Millbank House

House of Lords

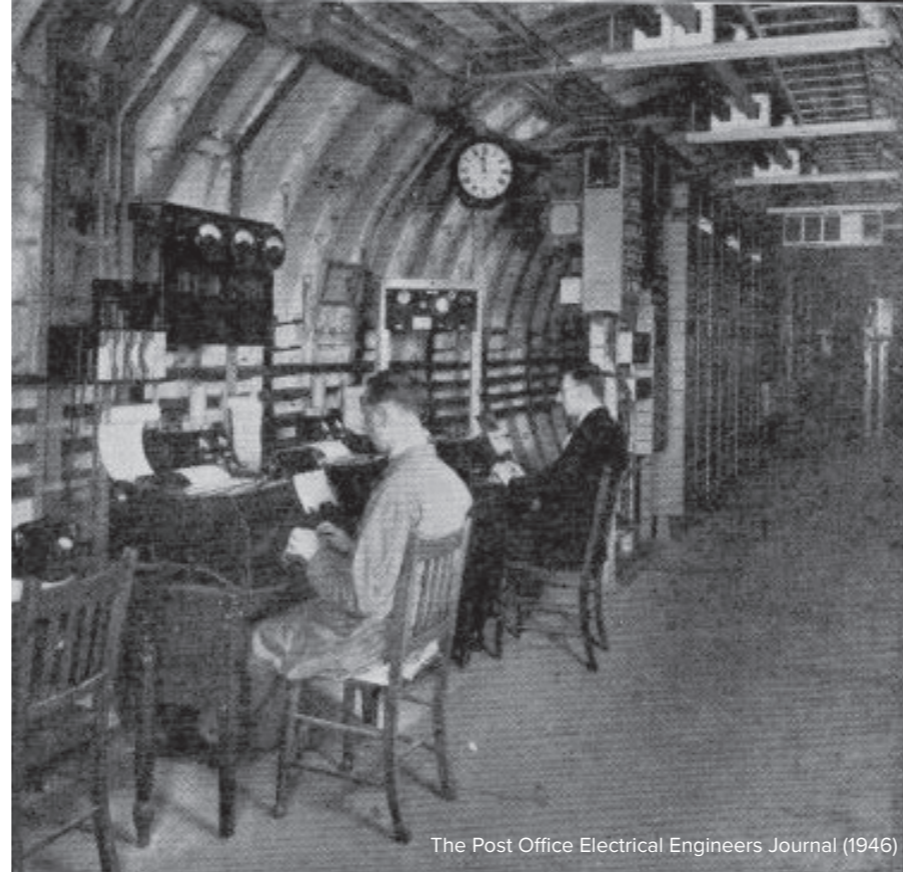
Lords Unknown

11 Q-Whitehall

A network of citadels & tunnels beneath Whitehall

“Planning for a deep network of Whitehall tunnels and War Rooms began before the Second World War. Each service ministry, the Cabinet War HQ and other civil and military administrators had protected accommodation in the ‘citadels’. A deep level tunnel and lift shafts linked each citadel. From 1950-53, new bunkers were built under Whitehall.”

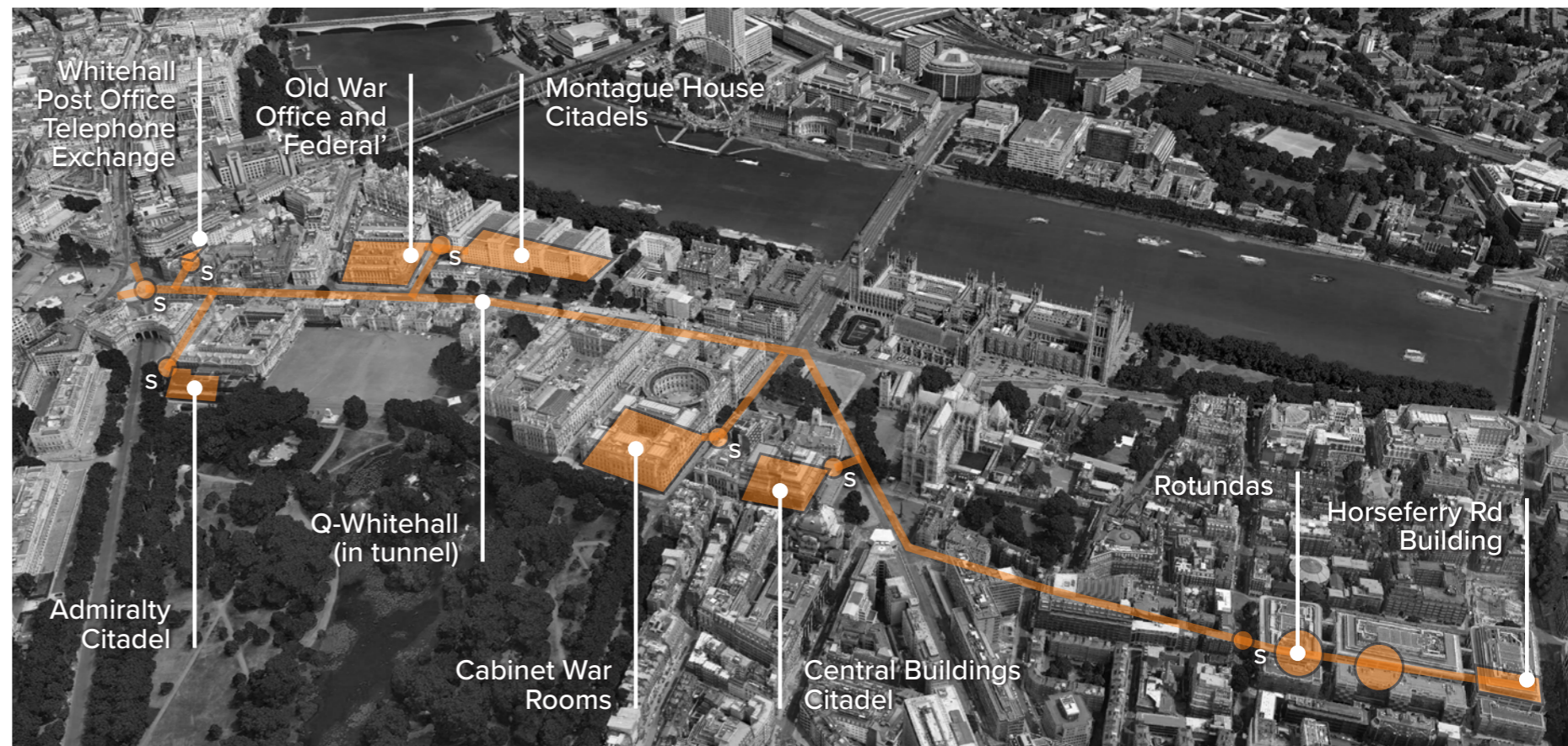
Duncan Campbell (1983; n.d.); Ian Visits (2009)



The Post Office Electrical Engineers Journal (1946)



The Post Office Electrical Engineers Journal (1946)



12 Palace of Westminster

Grade 1 listed, perpendicular gothic revival style

The Palace of Westminster was designed by Charles Barry and Augustus Pugin and constructed between 1840–70 to replace the previous Palace that was destroyed by fire in 1834. The building is predominantly classical in plan but Pugin's interiors are notably gothic.

The House of Commons was destroyed by a bomb during the second world war, and some members proposed rebuilding a modern interior but Churchill's rhetoric ensured it was rebuilt in the established gothic style, with opposing

benches and that the scale should not be adjusted to accommodate all members stating: "If the House is big enough to contain all its members, nine-tenths of its debates will be conducted in the depressing atmosphere of an almost empty chamber."

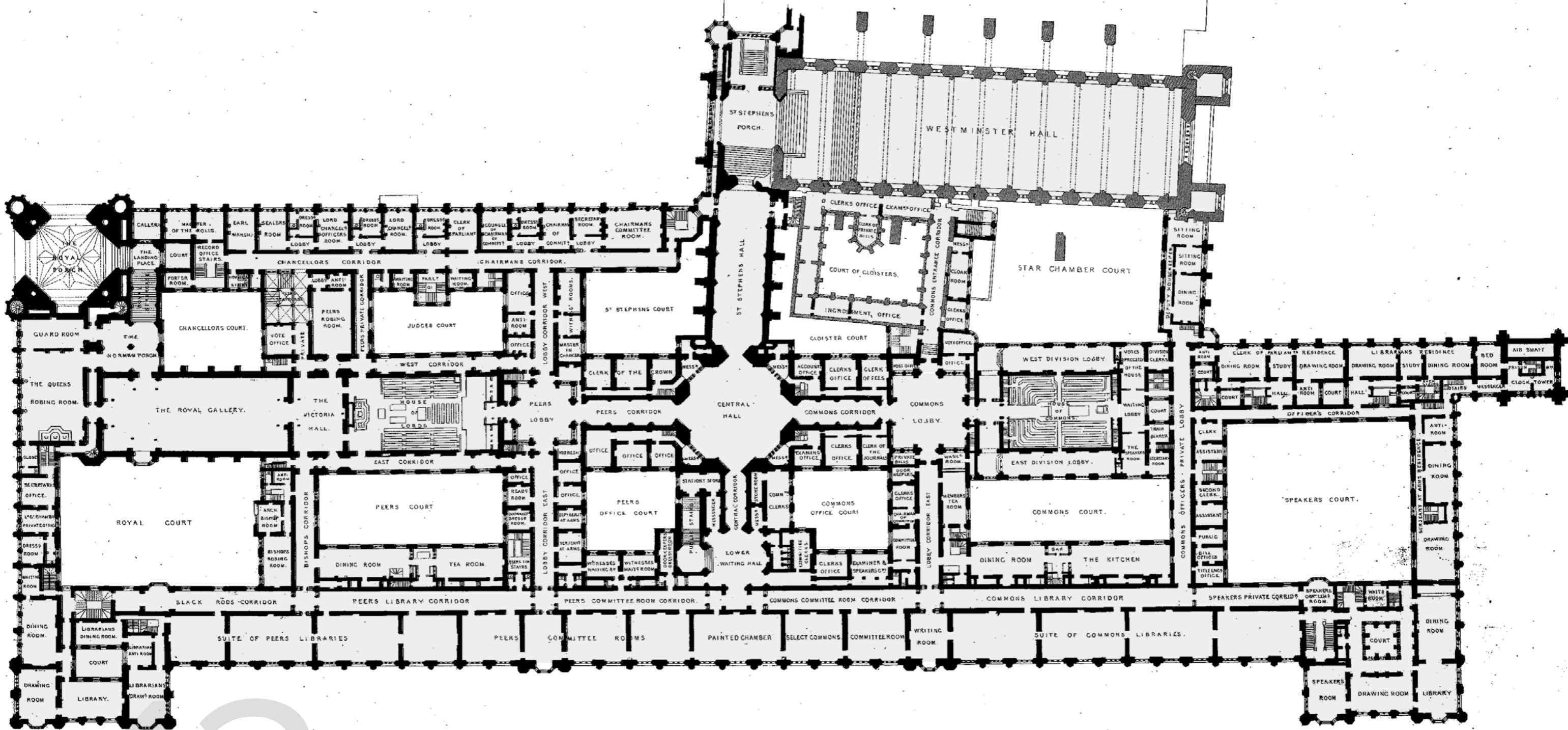
"We shape our buildings and afterwards our buildings shape us." Churchill (1943).

"The oldest part of the Palace, the Great Hall, or

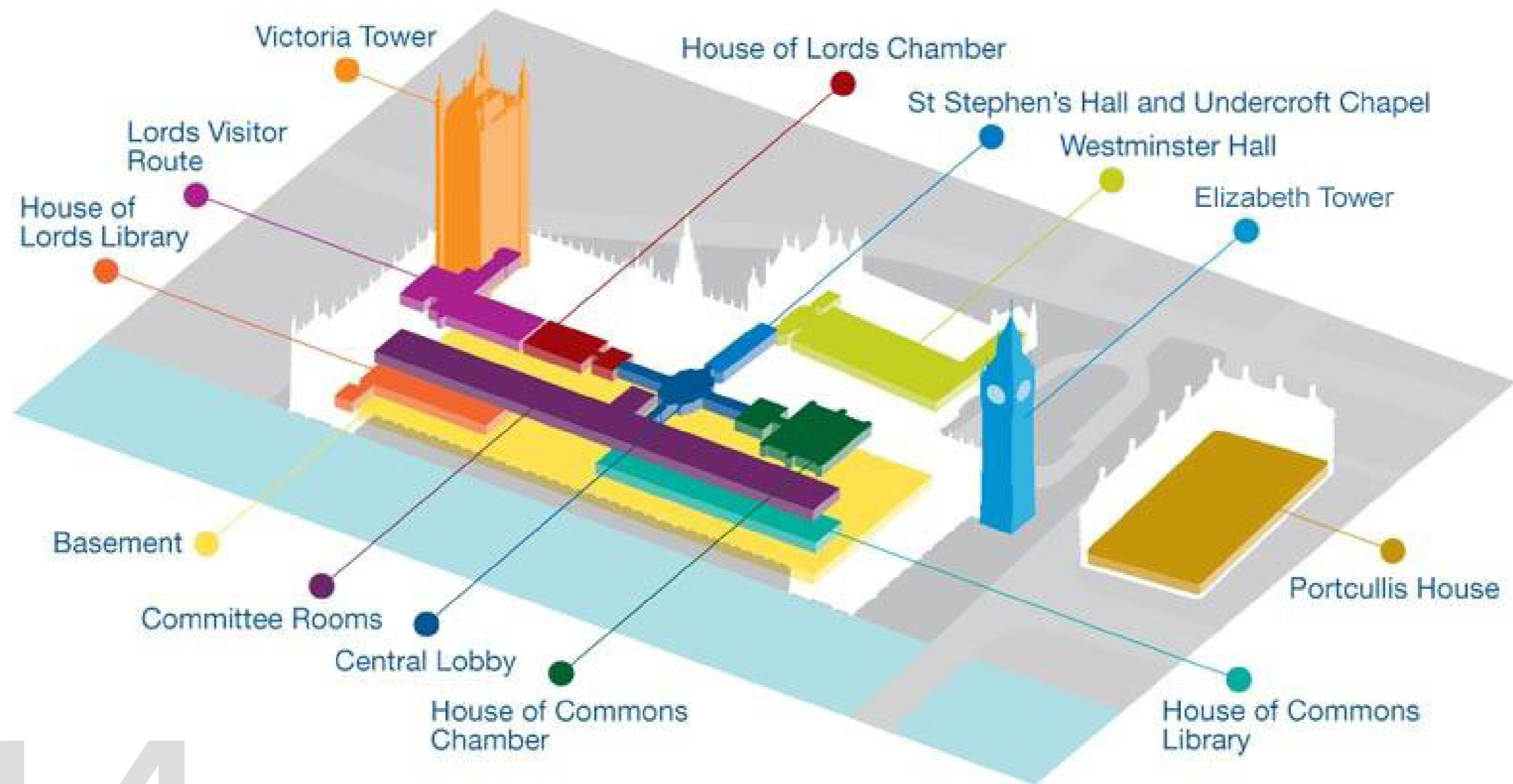


Kurt Bauschardt (2012)

Westminster Hall, was built by William II (William Rufus) at the end of the 11th Century, with a hammer beam roof installed by Richard II at the end of the 14th Century" Joint Committee on the Palace of Westminster (2016)

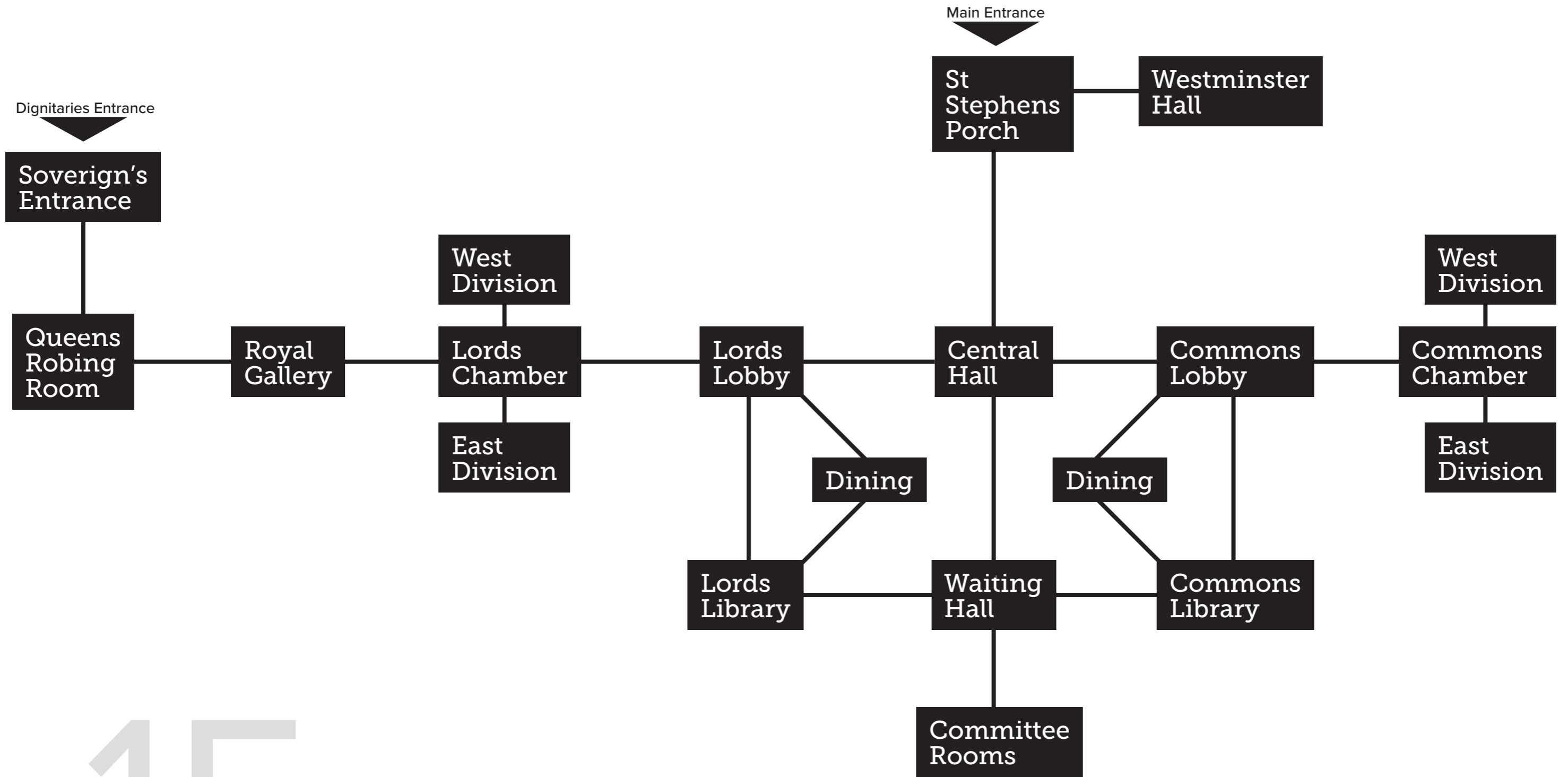


Principal Floor Plan Palace of Westminster



14 Use of Space

Palace of Westminster



15

Adjacency Diagram

Palace of Westminster

16 State Opening of Parliament

A formal and highly symbolic event to mark the annual opening of Parliament

Perhaps the most symbolic element of the occasion is the Royal Summons. The Gentleman Usher of the Black Rod is signalled to summon the Commons to assemble in the Lords Chamber to hear the Queen's Speech.

"Black Rod walks from Central Lobby to the Commons carrying the short black staff that is the symbol of his office. As Black Rod approaches the entrance to the Commons Chamber, the door is slammed shut in his face. This tradition symbolises the Commons' independence from the Sovereign." BBC (2014)



1. Searching of the cellars



2. Assembly of Peers and Commons



3. Arrival of royal regalia



4. Arrival of the Sovereign and assembly of Parliament



6 Procession of the Commons



7. Delivery of the speech



5. Royal summons of the Commons to the Lords' chamber



RELOCATION
**RESTORATION, RENEWAL
AND RELOCATION OF
PARLIAMENT**

18

The Need for Restoration

Risk of a major failure is now unacceptably high

“Flooding, power failures, fire hazards, freezing-cold rooms in winter and boiling hot-offices in the summer. These problems are due to the age of the building’s M&E services, most of which are hidden away, either in the basements underneath the Palace, or behind walls, under floor voids, within ceilings and in vertical ... risers.

Much of the M&E plant dates for the mid-20th Century; some of it dates from the Victorian era. ... They have been patched up year after year, often with new cables and pipes laid on top of old, and with little knowledge of what the existing services are or where they go.” *Joint Committee on the*

Palace of Westminster (2016)



Inaccessible layers of electrical wiring
Joint Committee on the Palace of Westminster (2016)



Detail of stone decay in Cloister Court
BBC (2014)

“We are just eight years away from being in a situation in which half the Palace’s systems are so dilapidated that they could cause a major emergency that stops Parliament’s work and forces our evacuation without warning” *Ellis (2017)*

As well as replacing the M&E services the restoration will have four other goals. Proper fire compartmentalisation and other fire safety measures will be installed in order to reduce the risk of a catastrophic fire event; accessibility will be improved to bring the building in line with modern standards; large amounts of asbestos throughout the building will be removed; and finally, the historic fabric will be conserved.

Speaking to the joint committee on Wednesday 25th January 2017, Chris Bryant MP disclosed “We should be in

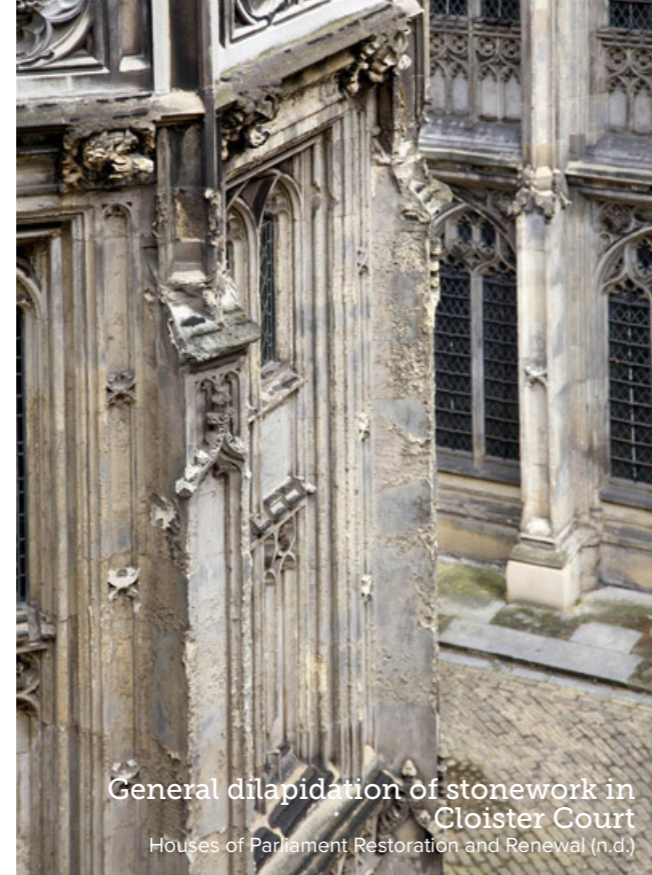
absolutely no doubt: there will be a fire. There was a fire a fortnight ago and there are regularly fires. People patrol the building 24 hours a day to ensure that we catch those fires.” “The problem in the building at the moment is that, if we were to have a fire, it could easily spread very quickly across a large part of the estate.” *Bryant (2017)*

A significant amount of stone decay is present on almost all external façades and especially evident in the hidden courtyards (*BBC, 2014*). Structurally it has been reported that the building is sinking in places (*BBC, 2014*).

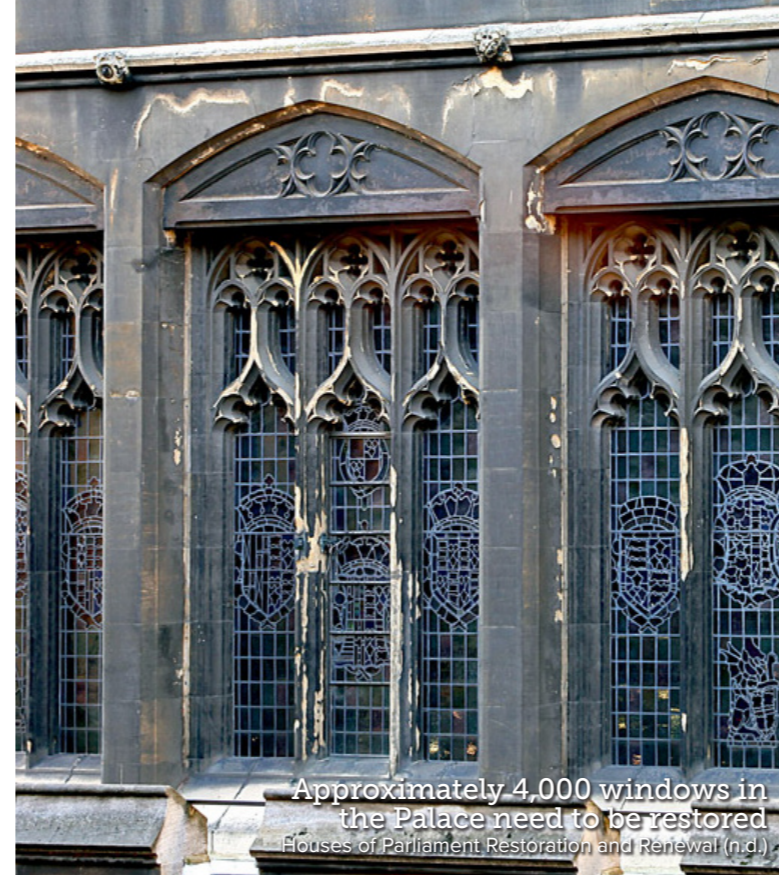
In 2016 alone the cost to keep the Palace of Westminster in a “working condition” was £49 million *Bryant (2017)*, and with every year the full restoration is delayed “£60 million to £85 million [is added] to the cost of the project” *Clifton-Brown (2017)*



Water leaks in the basement
Joint Committee on the
Palace of Westminster (2016)



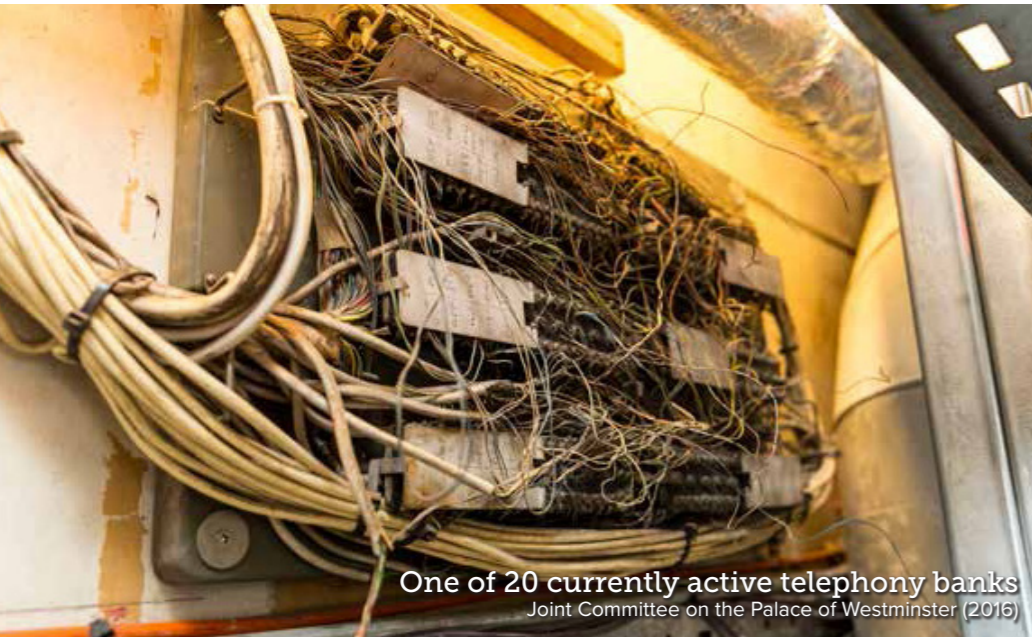
General dilapidation of stonework in
Cloister Court
Houses of Parliament Restoration and Renewal (n.d.)



Approximately 4,000 windows in
the Palace need to be restored
Houses of Parliament Restoration and Renewal (n.d.)



The effects of pollution evident in Chancellors Court
Houses of Parliament Restoration and Renewal (n.d.)



One of 20 currently active telephony banks
Joint Committee on the Palace of Westminster (2016)



Replacing tiles in the Central Hall
BBC (2014)

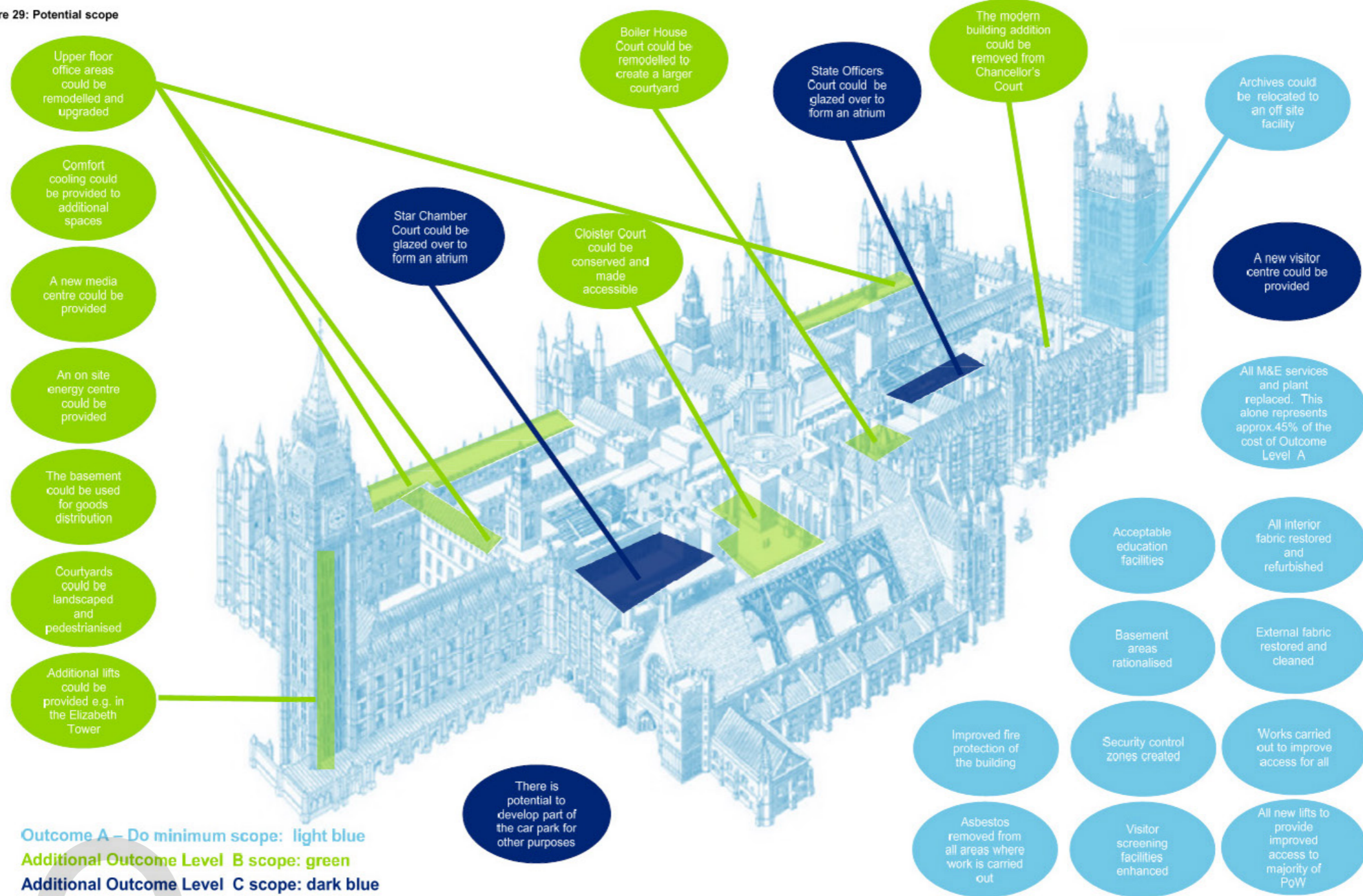


Condition of the cast iron roof
Houses of Parliament Restoration and Renewal (n.d.)

The Need for Restoration

Palace of Westminster

Figure 29: Potential scope



Sources: IOA Team analysis. Image copyright AECOM

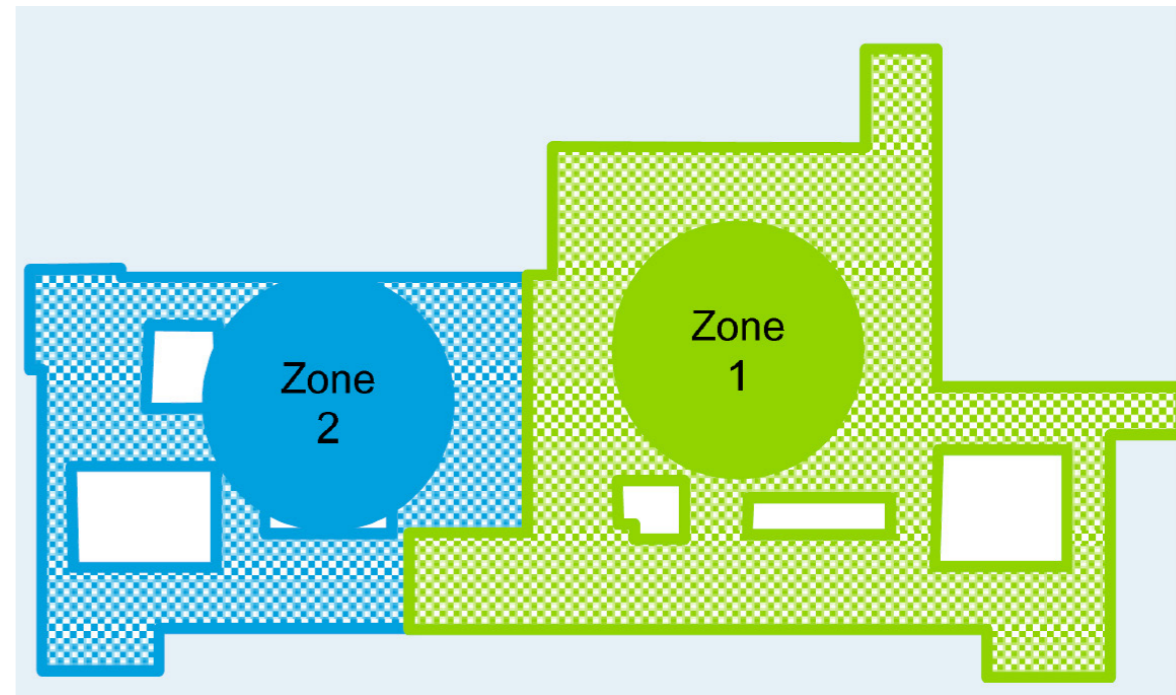
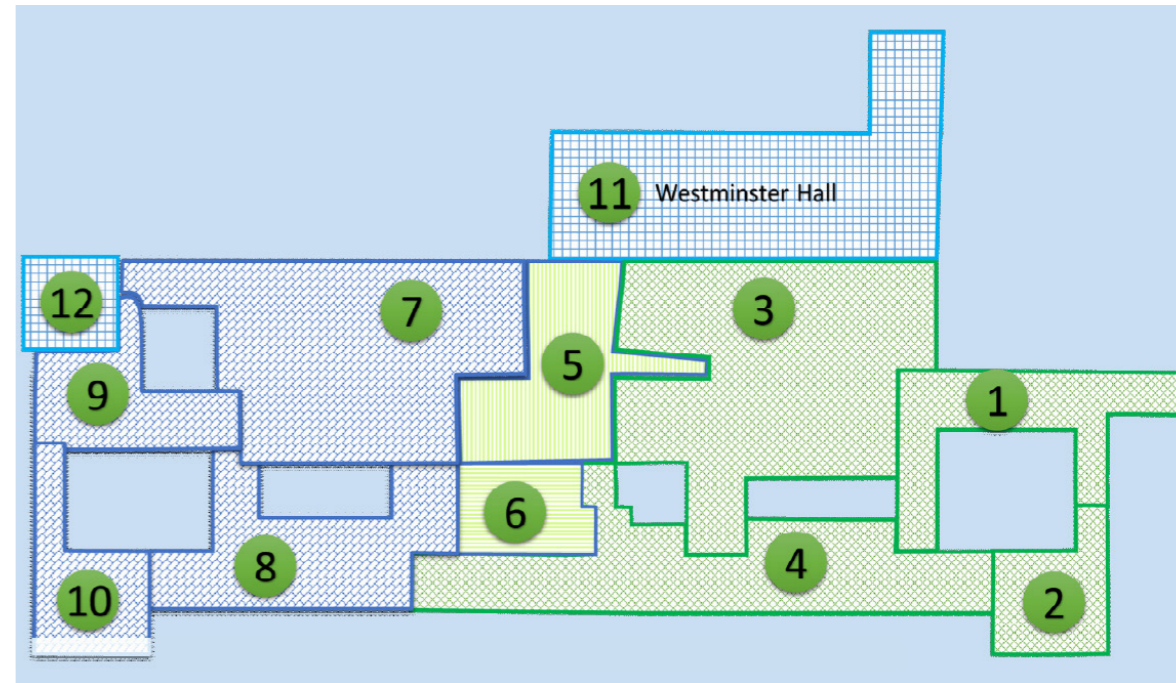
20 Restoration Opportunities

Palace of Westminster

21 Rolling Works or Partial Decant

Parts of the Palace would be vacated and then re-occupied as works progress

Both rolling works and a full decant have been deemed infeasible as construction work would likely cause significant disruption to parliamentary operations. Additionally the proposed timescales: 32 years and 11 years respectively could mean the existing plant within the Palace fails before it is completed. *Joint Committee on the Palace of Westminster (2016)*. If the Palace were to remain occupied during the restoration it is believed the costs would increase by £900 million *Bryant (2017)*



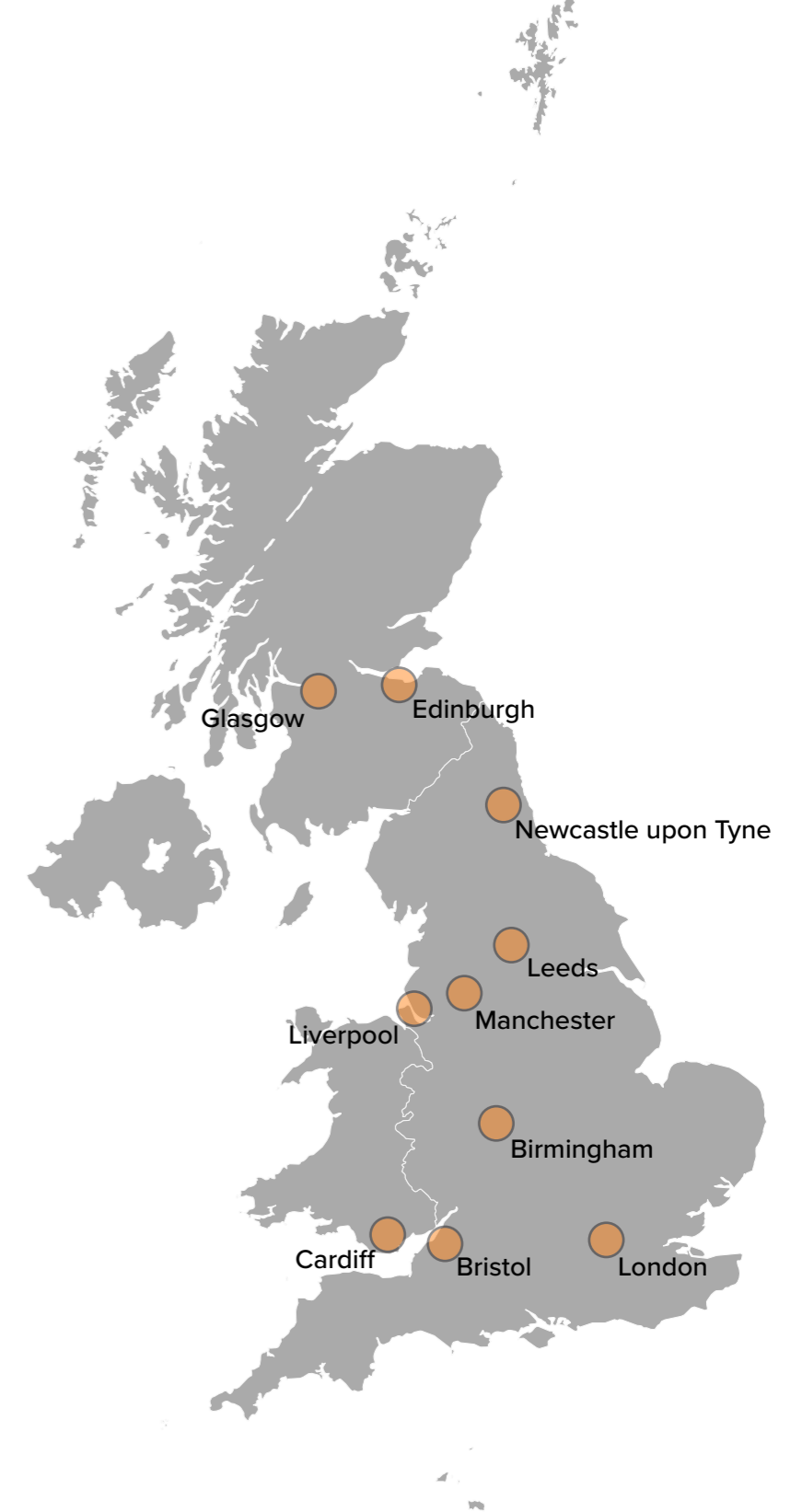
2022 Permanent Relocation Outside London

Moving Parliament to another region within the UK

This would greatly benefit the region to which it were moved and would likely reduce construction costs, however, it has been deemed impractical as both Houses own considerable real estate within proximity of Whitehall and Ministers need access to their, and other departments. As such the only feasible method would be to move the entirety of Parliament and Government. This could be funded by selling Whitehall real estate and each region could provide a proposal as to why they should become the seat of Government.

Precedent exists for moving Parliament within a state as “three-quarters of the cities that currently serve as national capitals were not capitals of independent states when the twentieth century began.” *Vale (2008)*

The most renowned example is the move of the Australian Parliament to a new city located equally between Sydney and Melbourne.

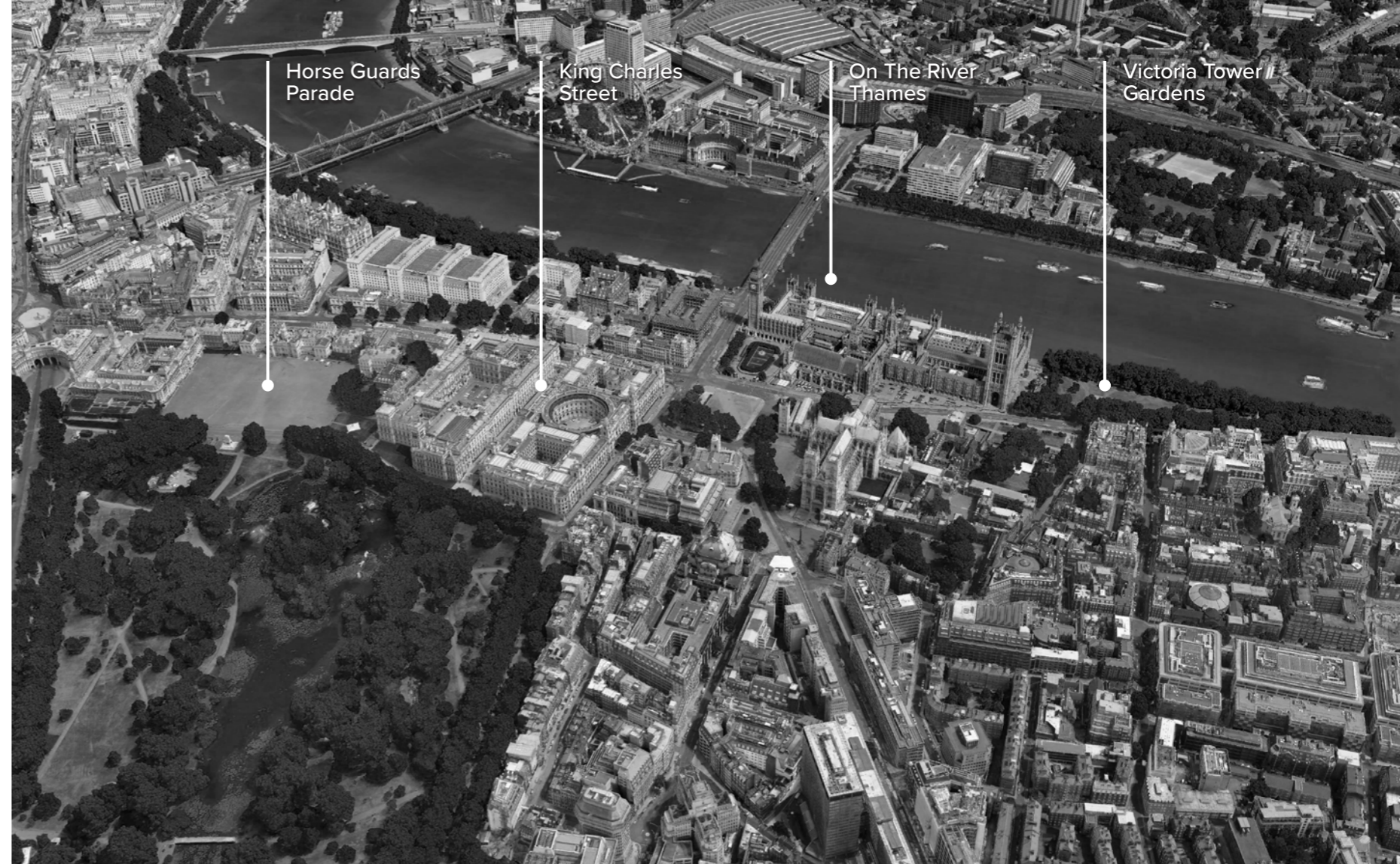


23 Permanent Relocation Within London

Relocating within proximity of
Whitehall

A permanent move would leave great scope for potential uses for the Palace of Westminster. Such as a parliamentary museum, education and archives heritage centre. The new Parliament would need to be located close to existing parliamentary and government real estate.

Four sites have been identified: The River Thames, Victoria Tower Gardens and Horse Guards Parade.




24 Temporary Relocation Within London

Temporary relocation for 5-8 years of works

A temporary relocation is only feasible if the new parliament were to be built within proximity of Whitehall as members will continue to require access to the departments within which they work and other offices within the parliamentary estate. If Parliament is fully decanted for the 5-8 years of works Deloitte (2014) estimates the costs for the restoration of the Palace of Westminster a minimum of £3.5 million, and as high as £3.9 billion if facilities are significantly enhanced.

The Provisional Parliament House was established in Canberra as a temporary venue for the Australian Parliament but went on to serve the country for 61 years.





PROGRAMME
**TYOLOGY,
PRECEDENT AND
PROGRAMME**

26

What is a Parliament Building?

Power, identity & influence

The expression of “the political balance of power in the society the produces them. ... Architecture helps to reveal who matters in a complex and plural society. It is the setting through which we express ideas like democracy, or freedom, or other kinds of national values, and this colours the way the citizen sees and perceives the government.”

(Vale, 2008, p. viii)

However the world has changed dramatically since the Palace of Westminster was first conceived. In 1998 The Scottish Parliament Building was being designed but following the events of September 11th 2001 the scheme practically returned to the drawing board as security became the chief concern. This leave us in a world where we are almost removed from our democratic representatives. The final costs of the Scottish Parliament building were £414 million, over 10 times greater than the initial cost estimate of £40 million. Although there were many contributors to this increase the increased security demands were a major contributing factor.

“We see them through the facade of their workplace, beyond the gates, behind the security barriers. Government buildings provide a kind of protective layer around direct human interaction.”

(Vale, 2008, p. ix)

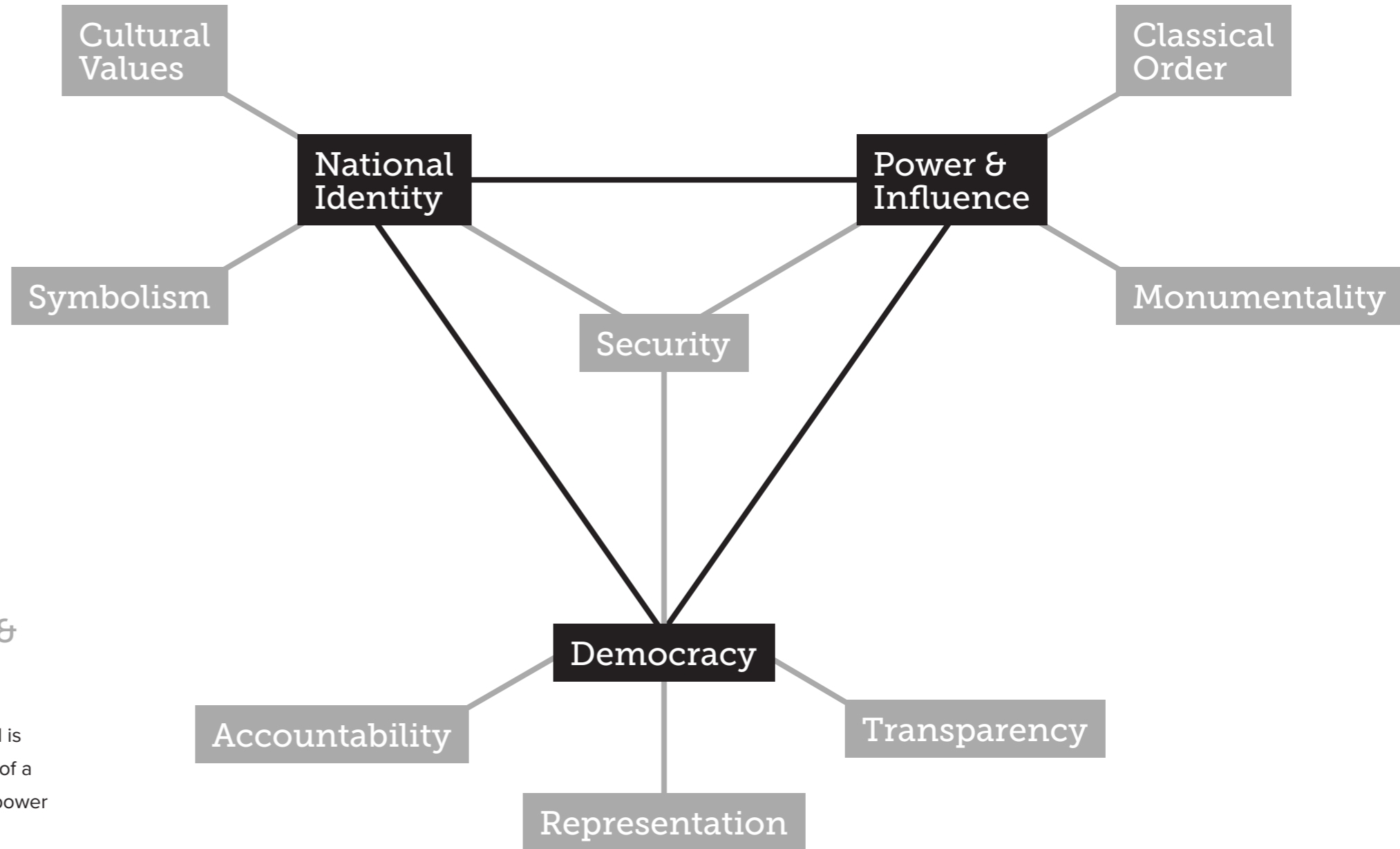
The Palace of Westminster already embodies tradition, power and identity, therefore, a new parliament need not embody these values, it should instead prioritise the fundamentals of democracy that are absent from the architecture of the Palace: transparency and accountability.

27 Values of a Parliament Building

A balance of democracy, national identity, and power & influence of the nation

Within a democracy the Parliament Building or Capitol is typically an architectural representation of the values of a nation, a balance between the values of democracy, power & influence and national identity.

However, over time these values have become eroded by increased security environments that overwhelm and compromise these core values.



28

Precedent: Reichstag Building

1992 intervention by Norman Foster

Foster's 1992 Reichstag restoration draws inspiration from the frustum adorning Le Corbusier's Chandigarh Assembly. A glass dome dominates the roofscape, announcing the assembly chamber.

The dome is both a symbol of democracy and a technological environmental device. Hot air rises from the assembly chamber below to be mechanically evacuated while natural light is filtered down. A mirrored reflector 'reminiscent of that of a lighthouse' (Buchanan, 2000)

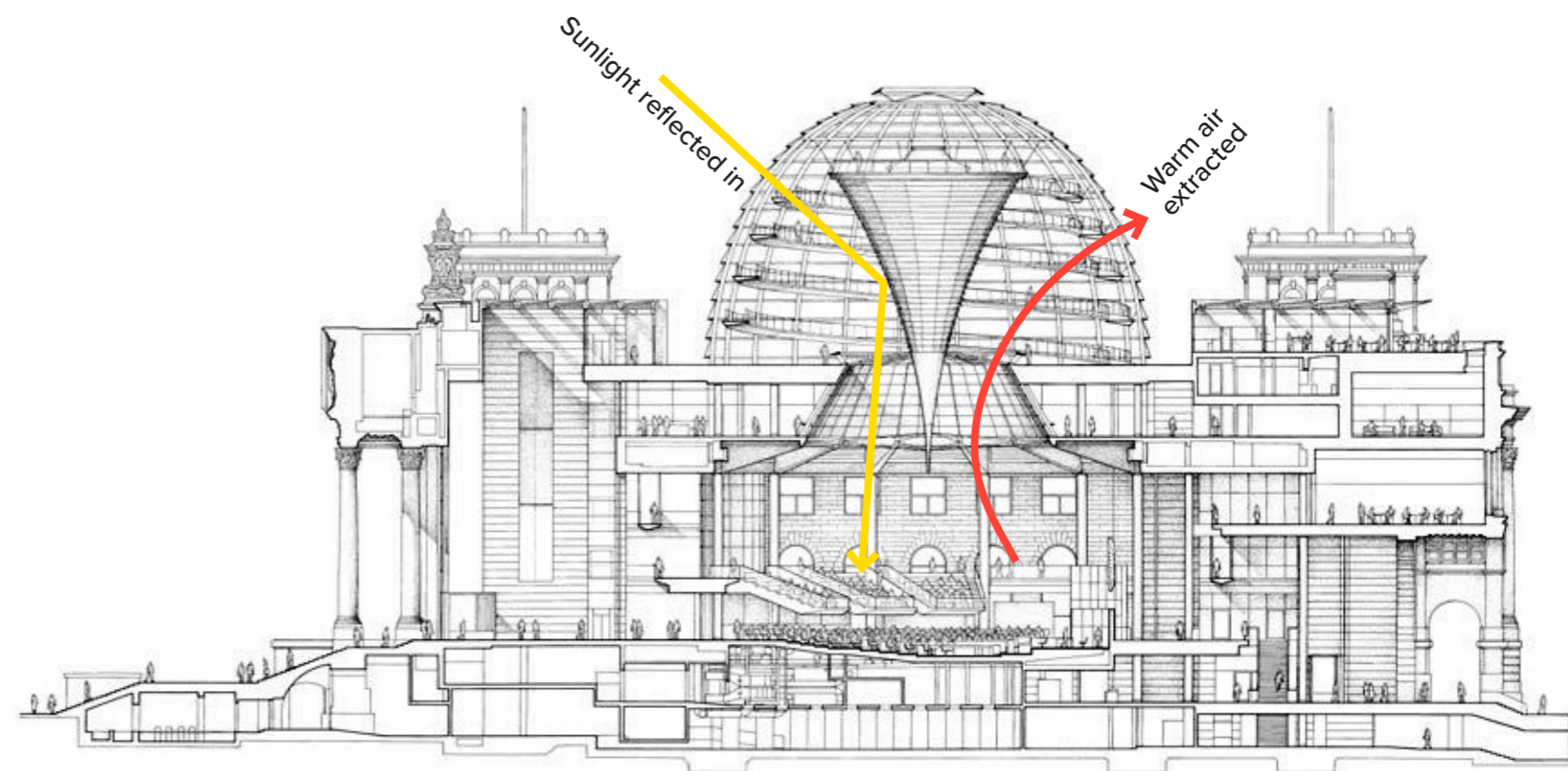
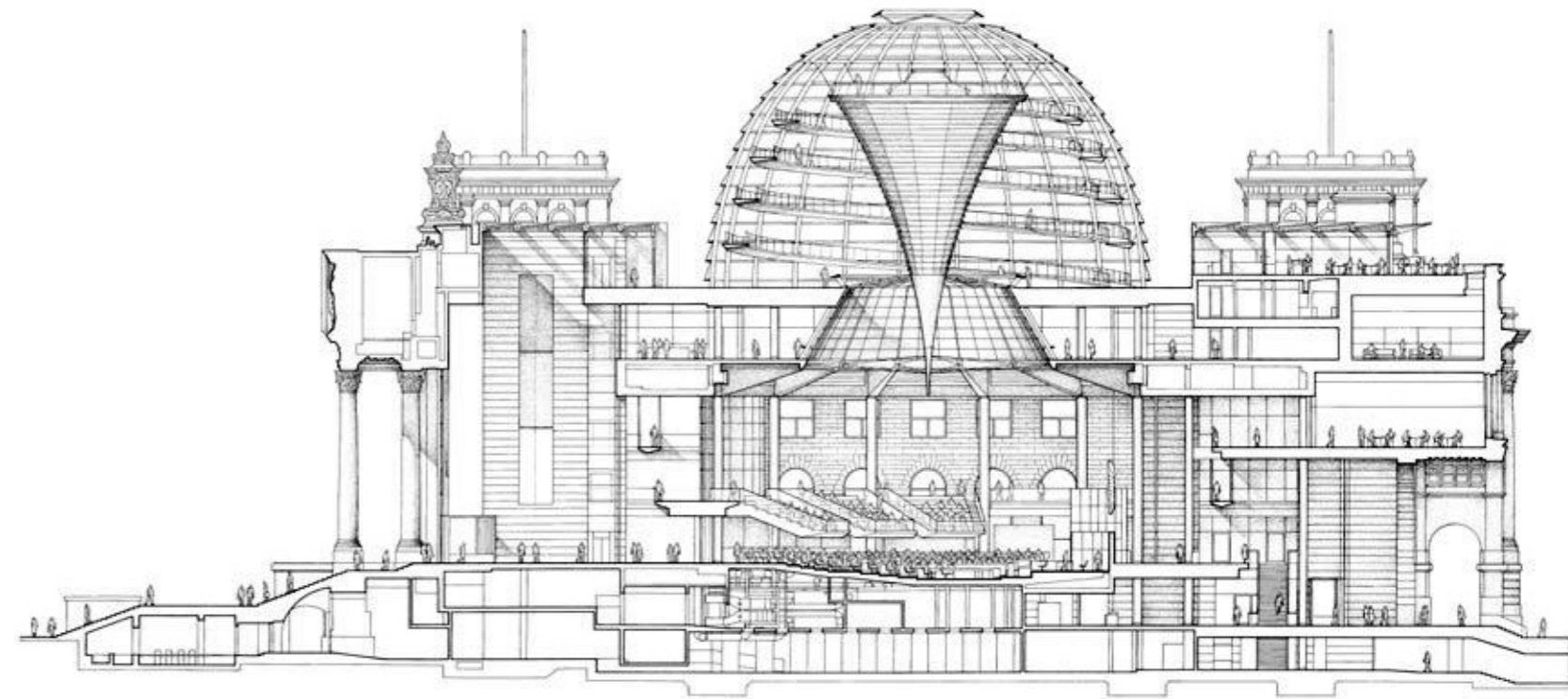


serves dual purpose, by day it maximises the daylight potential of the assembly chamber and at night it reflects the chamber lights out into the night sky, a beacon announcing that parliament is in session.

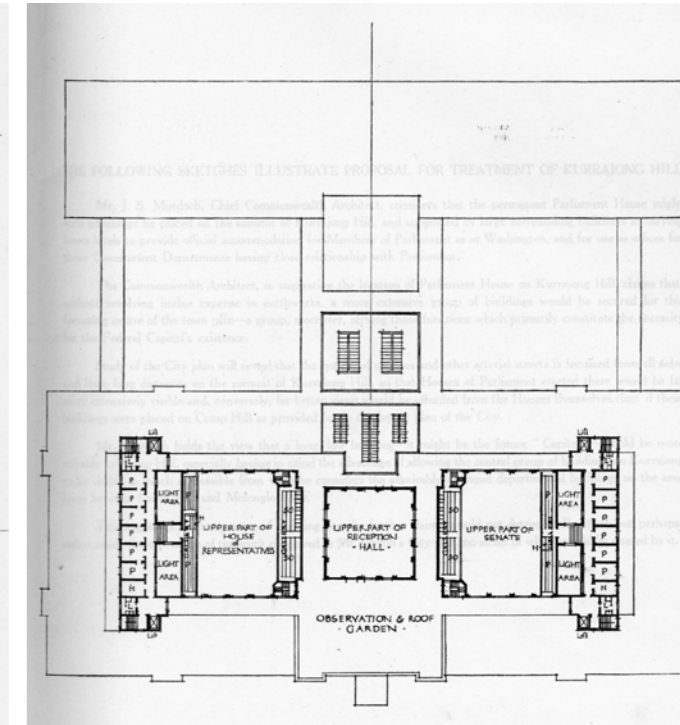
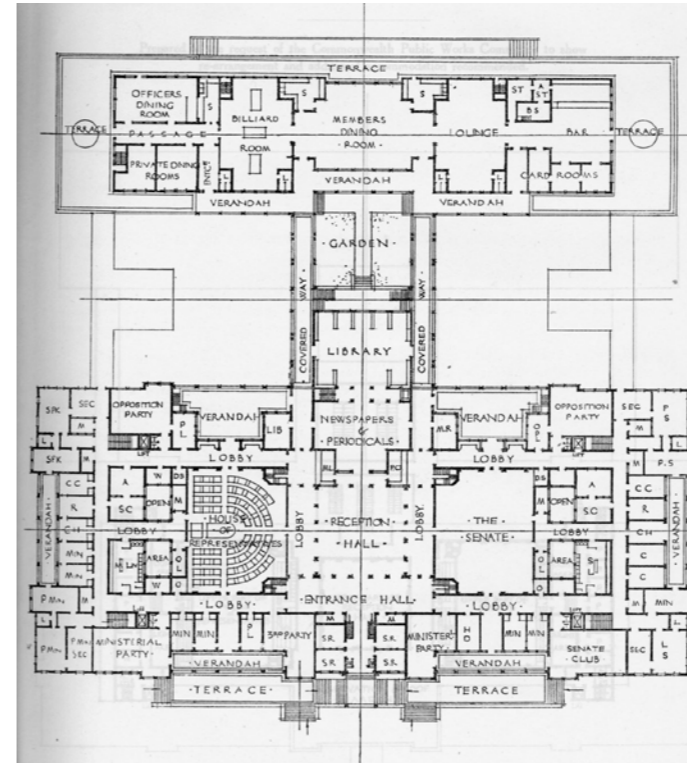
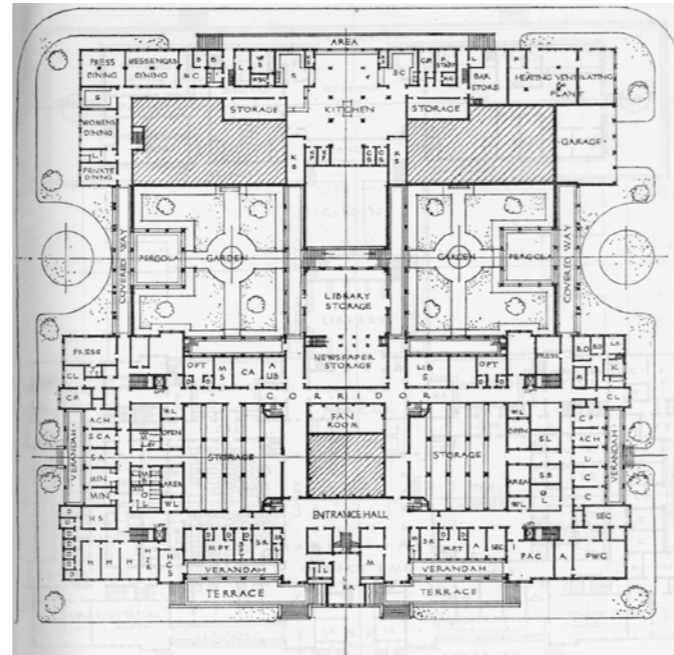
The public have reign of the roof terrace, with the fantastic views out across Berlin from the elevated spiralling ramp within the dome which also provides view down into the chamber below.

At the public entrance the openness of the chamber is immediate, “upon entering the Reichstag, members of the public are offered a clear view into, and through, the chamber via the glazed screen” (Buchanan, 2000). While a symbol of transparency suggesting the ‘accountability of politicians’ it can also be seen as a defined physical barrier between the public and the politicians. Further in the building invited public get the opportunity to walk down the same high-vaulted corridors as their elected representatives but they must do so on suspended bridges. a clear barrier suggesting that perhaps the public and politicians are not equals.

The assembly chamber is laid out in a compressed semi-circle staying true to the democratic legacy of ancient Greece. Tribunes rise above the chamber permitting invited members of the public and media to oversee proceedings while maintaining a distinct separation for the safety and security of the politicians.



30 Precedent: Provisional Parliament House, Canberra



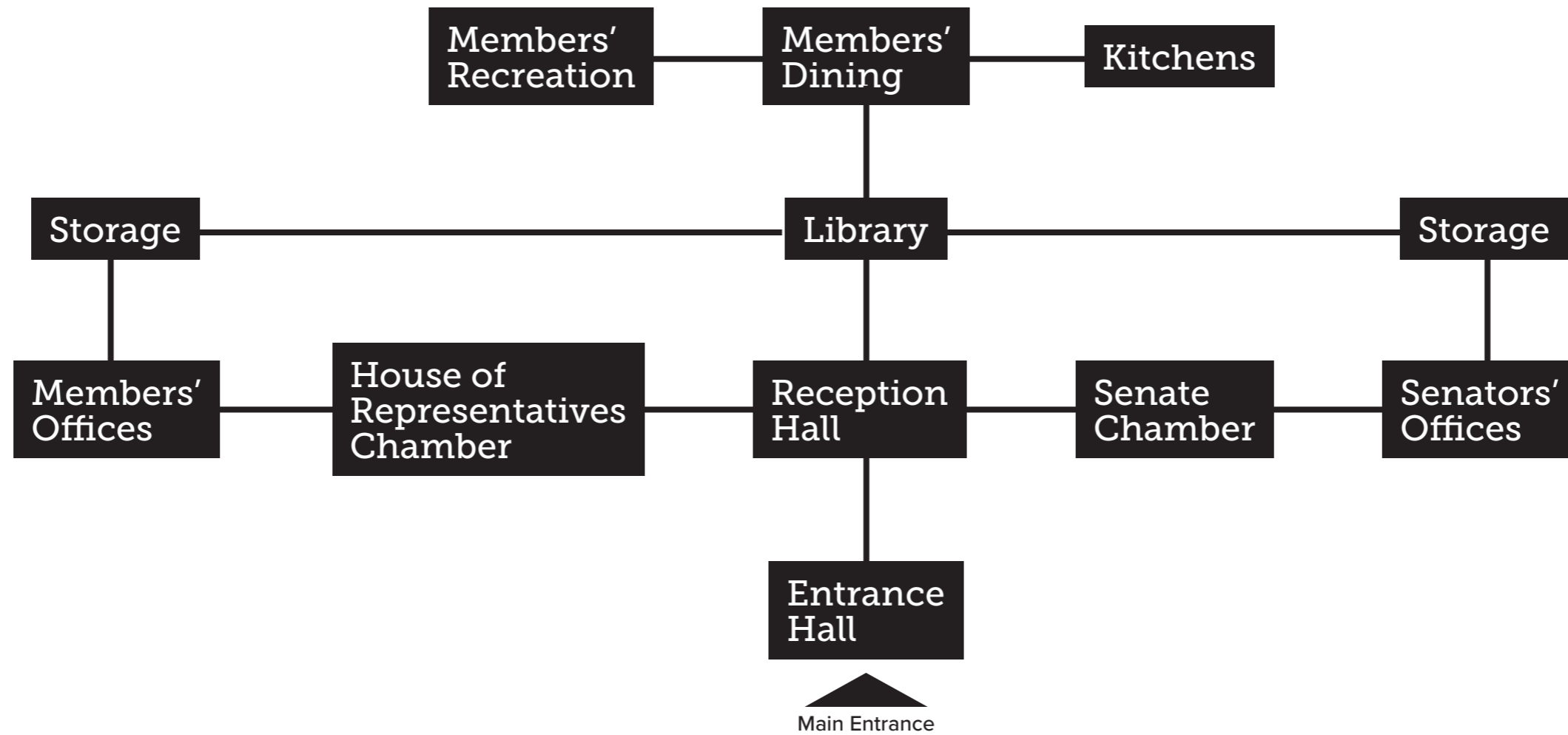
A temporary parliament building which lasted 61 years

“Intended as a temporary home for federal Parliament, Provisional (Old) Parliament House remained in operation for 61 years.” Parliamentary Education Office (n.d.-c)

Designed by John Smith Murdoch it was built to serve the needs for Parliament in the new capital of Canberra while a more permanent Parliament was designed.

After Parliament was moved to the new Parliament House in 1988 the Provisional Parliament served a number of legacy purposes including a venue for temporary exhibitions, lectures and concerts and in 2009 was reopened as the Museum of Australian Democracy at Old Parliament House.





31

Adjacency Diagram

Provisional Parliament House, Canberra

32

Precident: Parliament House, Canberra

A Parliament built into the landscape

Parliament House, designed by Mitchell/Giurgola and Thorp Architects opened in 1988, with over 250,000 m² of floor space it is the largest building in the southern hemisphere.

The site for the Parliament was identified in Griffin's 1913 masterplan for the new city of Canberra. Unlike most Parliamentary architecture, which are typically dominating,



RIBA (n.d.)

monumental structures to emphasise the power and influence of the nation, Parliament House is built into the landscape. Topped with grass, the roof form recreates the shape and scale of Capital Hill making the building “at once modest and monumental” Vale (2008).

The grass roofscape is open to the public “allowing the public to climb above its legislators [in what] seems a crude, if powerful metaphor for popular sovereignty.” Vale (2008).

However, in contrast to the ideals of sovereignty and democratic freedom, congregation and demonstration on the roofscape is restricted.

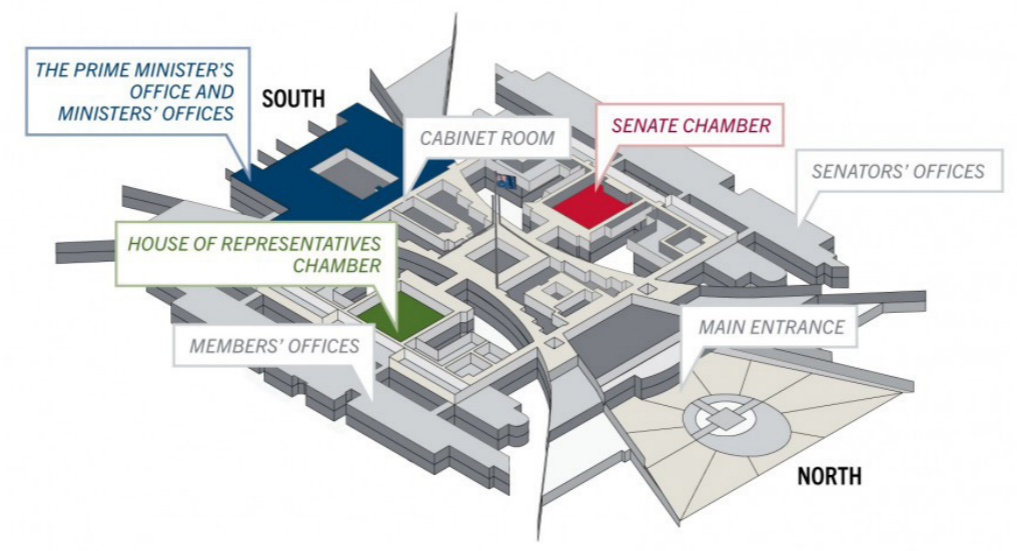
The Australian Parliament proudly publicise that 90% of the materials and products in the Parliament are Australian and that the skills of individuals from every state and territory were used.



Vale (2008)

AUSTRALIA'S PARLIAMENT HOUSE

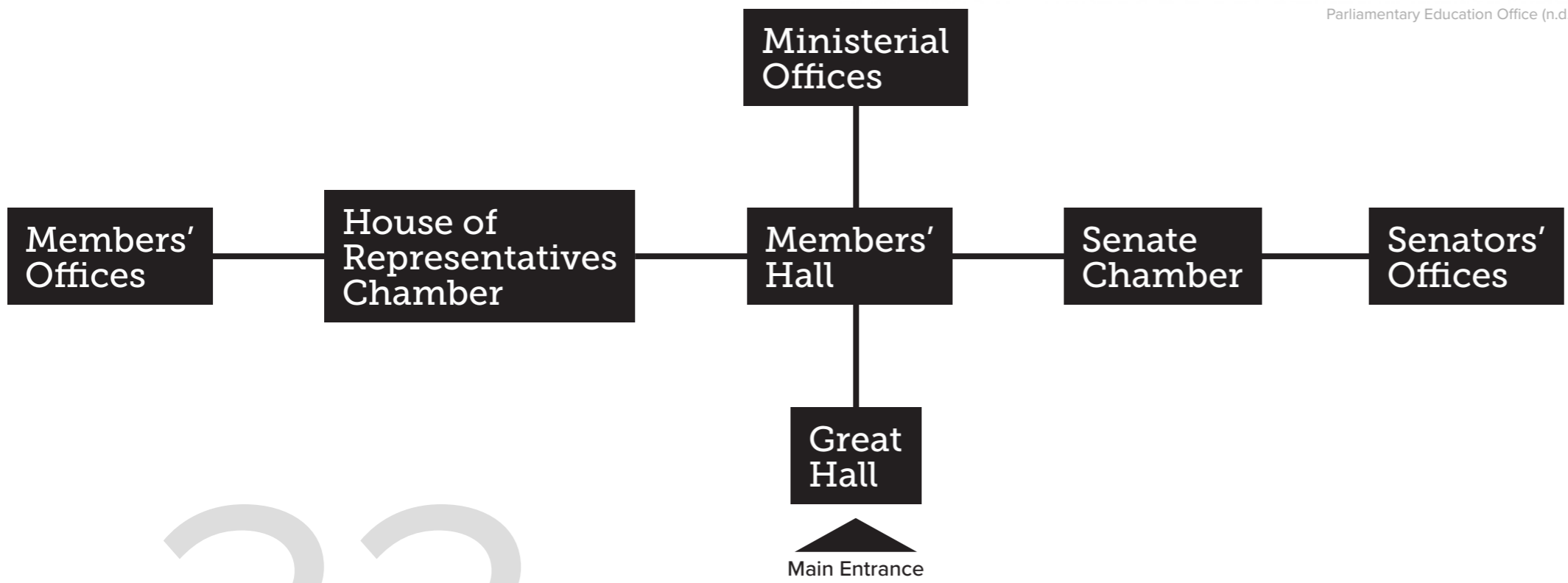
Floor plan



Parliamentary Education Office (n.d.-a)



Parliamentary Education Office (n.d.-b)



33

Adjacency Diagram Parliament House, Canberra



Parliamentary Education Office (n.d.-b)

34

Precedent: Newcastle Central Station

Ryder create a new atrium in the grade 1 listed portico

The existing entrance portico of Newcastle Central Station was sensitively internalised with a “contemporary, separate glazed enclosure behind the historic stone façade” Ryder (n.d.)



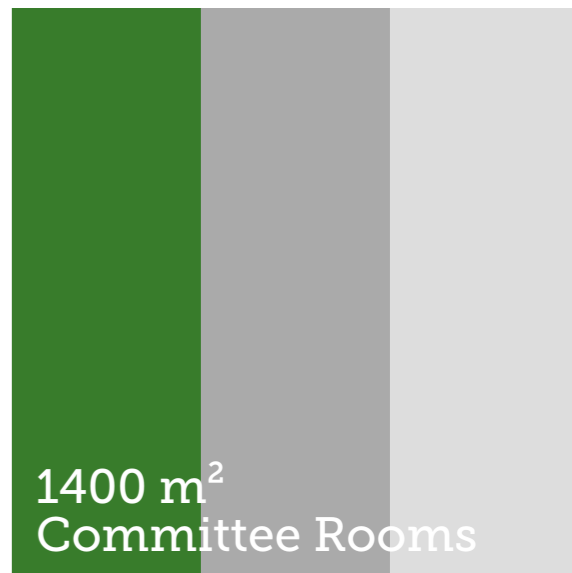
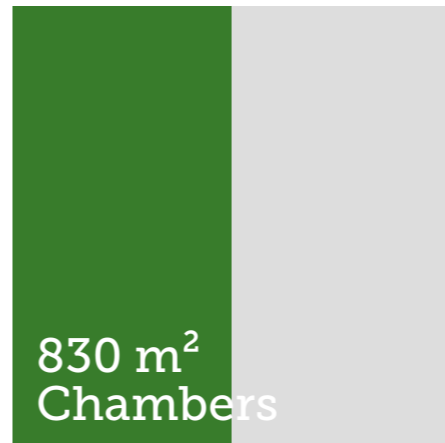
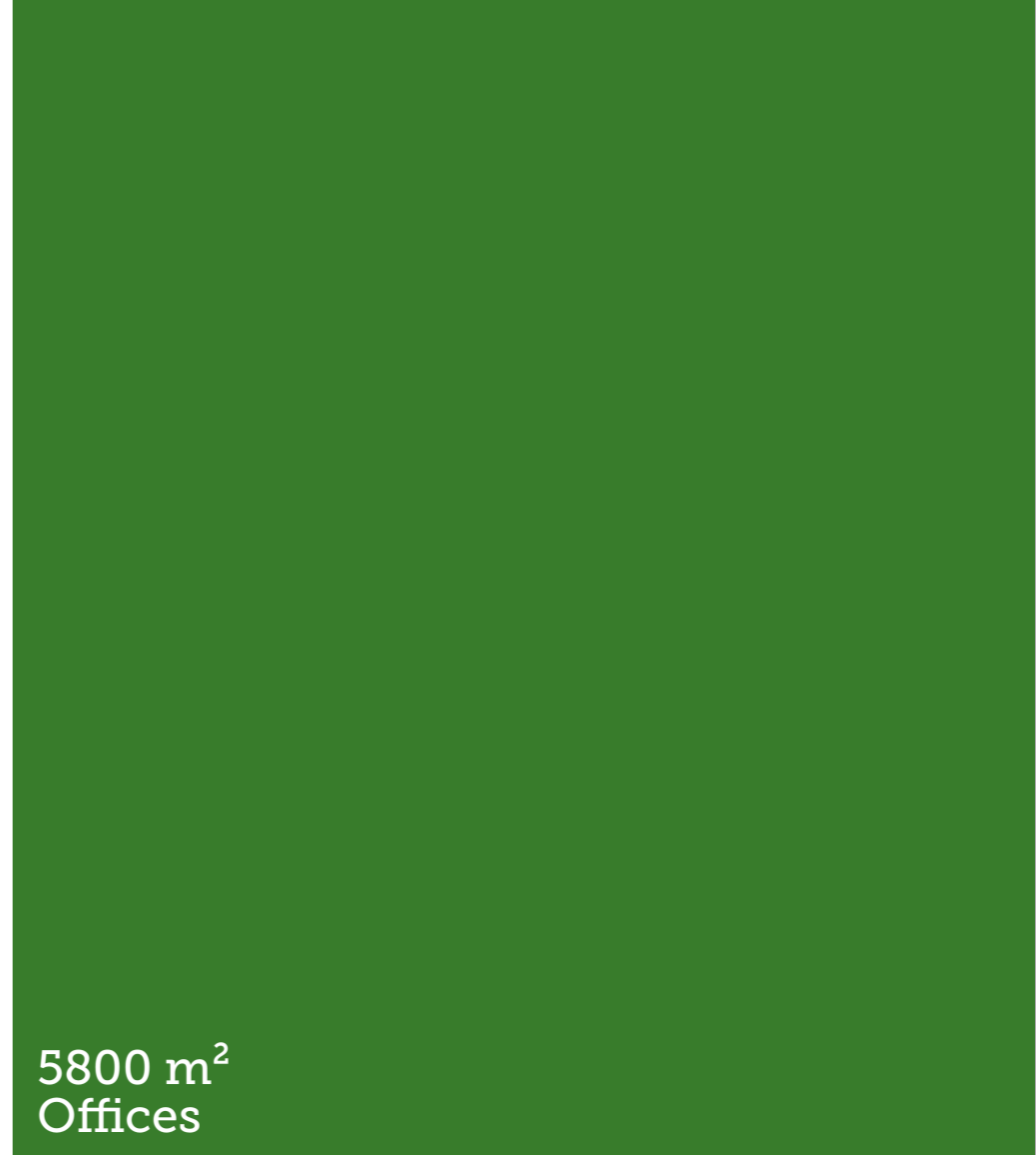
Ryder (n.d.)



Ryder (n.d.)



Ryder (n.d.)



Key
■ House of Commons
■ Joint
■ House of Lords and other

35

Total Accommodation

Palace of Westminster

36 Offices

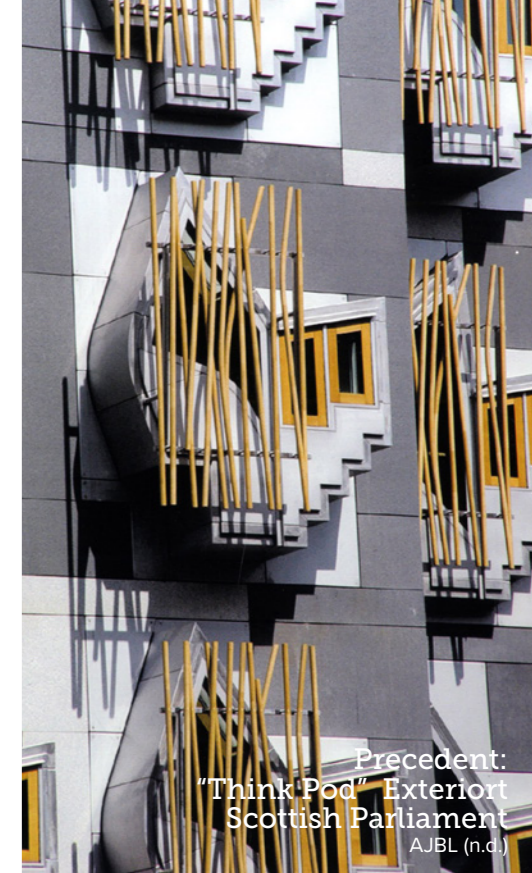
5800 m²



Precedent:
MP Office
Portcullis House
Hopkins (2000)



Precedent:
MSP Office with "Think Pod"
Scottish Parliament
The Scottish Parliament (n.d.)



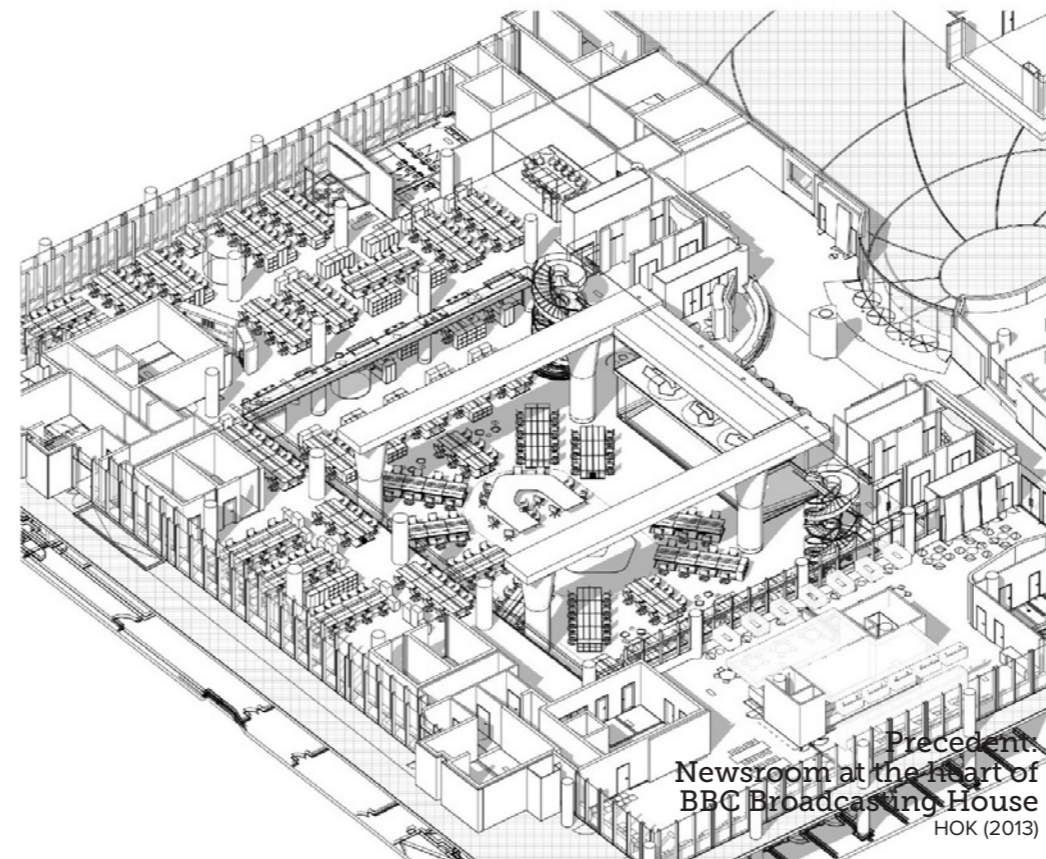
Precedent:
"Think Pod" Exterior
Scottish Parliament
AJBL (n.d.)

The offices will accommodate the 233 MPs, 288 MP staff and 152 press who are currently resident in the Palace of Westminster. The total 5800 m² is comprised of 3000 m² for MP offices, 2100 m² of office / desk space for their staff and 700 m² of desk space for members of the press, ideally located within close proximity of the chamber.

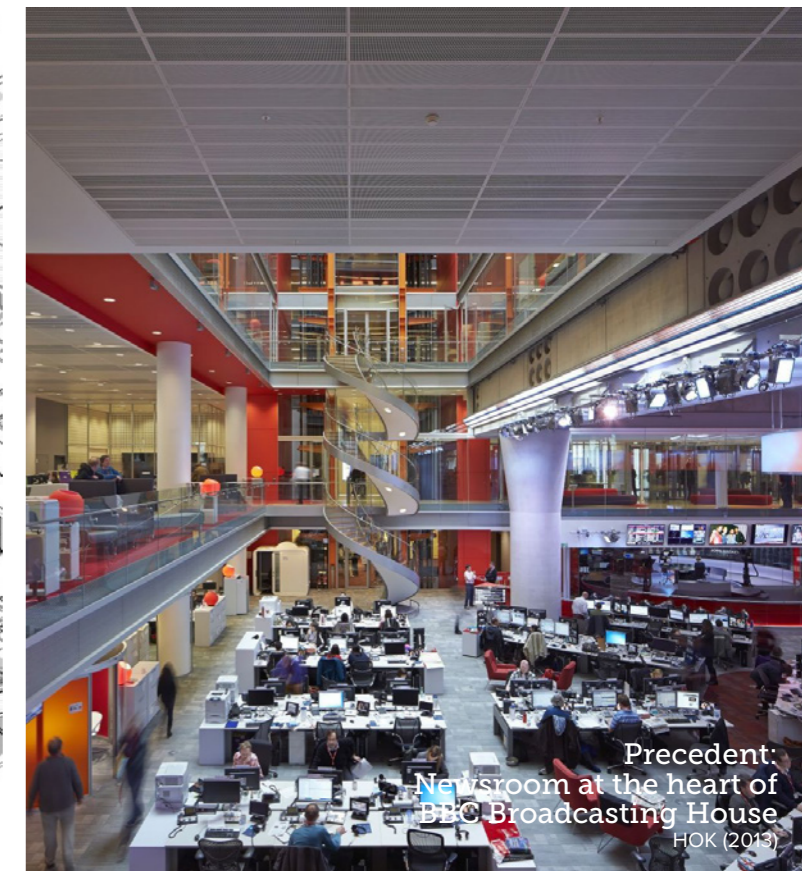
According to HOK (2002) each MP requires a minimum of 12.5 m² of office space and on average each member has 1.5 staff who will require desk space close to their employer.

It is also noted that at present 45 MP offices within the Palace of Westminster are windowless and a number of others have very little natural light; some are in need of refurbishment. House of Commons Administration Committee (2005)

HOK (2002)



Precedent:
Newsroom at the heart of
BBC Broadcasting House
HOK (2013)



Precedent:
Newsroom at the heart of
BBC Broadcasting House
HOK (2013)

37 Library

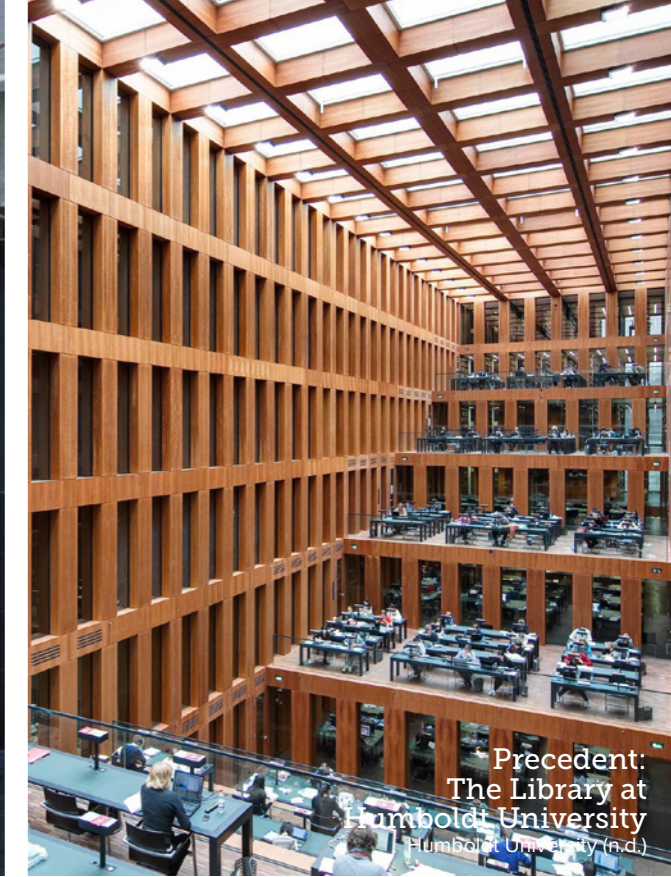
1200 m²



Derby Room
House of Lords Library
UK Parliament (2008c)



Precedent:
Frankfurt Library
Ben Elliott (n.d.)



Precedent:
The Library at
Humboldt University
Humboldt University (n.d.)

The House of Lords and House of Commons each have a library within the Palace of Westminster. At 775 m² the Commons library is significantly larger. Along with providing an information service the libraries also serve as writing space for members between debates.

The libraries ensure “Members and their staff can access the information they need to perform their parliamentary duties effectively. As well as providing access to key documents, the Library’s subject and information specialists respond to hundreds of requests for information each week, and prepare briefings on legislation and the vast array of other topics in which Members are interested.” www.parliament.uk (n.d.-a)



House of Commons Library
www.parliament.uk (n.d.-a)



Precedent:
Philological Library
Norman Foster
Car Los (2008)

38 Committee Rooms



House of Commons
Committee Room
Zetrographica (2014)



House of Commons
Committee Room
ASH.uk (2010)



House of Lords
Committee Room
ASH.uk (2013)

1400 m²

The 19 committee rooms within the Palace of Westminster are complemented by newer rooms in Portcullis House. The rooms are divided between Lords, Commons and Joint committees with furniture coloured to suit.

“Select committee rooms are arranged with the Members seated in a semi-circle: the chair sits in the middle facing the witnesses and the public. This is a less adversarial layout than the Commons Chamber and encourages committees to be collaborative. Select committees in general proceed on the basis of consensus.” www.parliament.uk (n.d.-b)



Precedent:
Committee Room
Portcullis House
Adam Elder (2004)



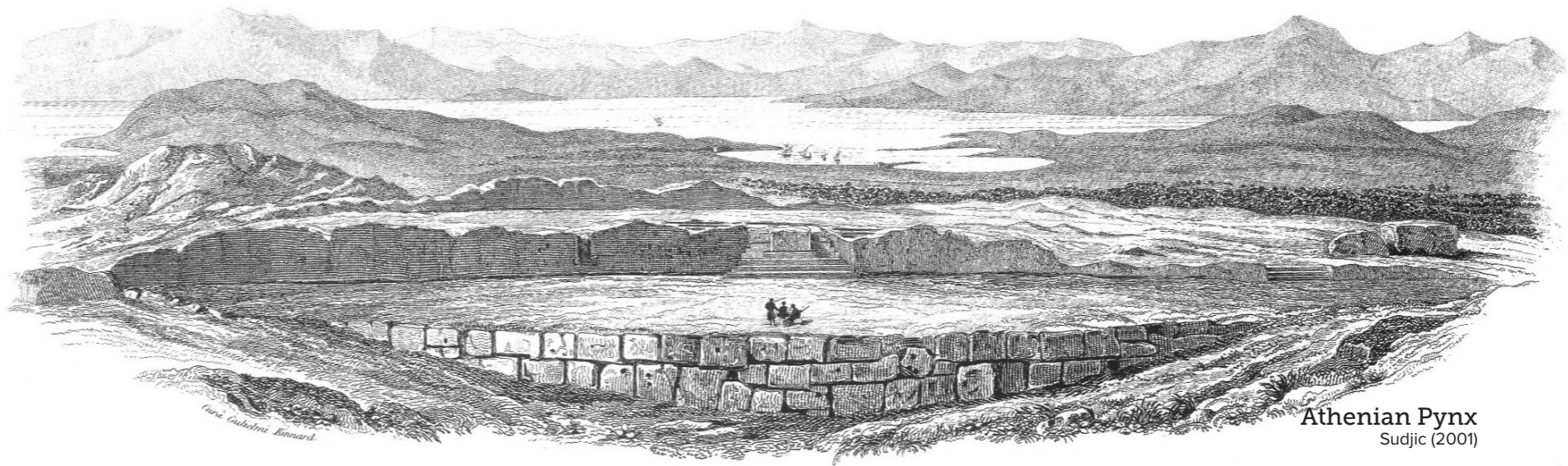
Precedent:
Committee Room
Scottish Parliament
Adam Elder (2004)

39 Parliamentary Chamber Typologies

The architecture of democracy

Democracy – derived from *demokratia*, *demos*: the people, or the citizenry and *kratos*: rule – is the rule of people, by the people as equals. At its formation the stage of democracy was the Athenian Pnyx where *ekklesia* – public meetings of at least 6000 citizens – were held every nine days.

The scale of the *demos* and the Mediterranean climate made it logical to hold meetings in the open air and the semi-circular Pnyx “ensured that every participant could not just see the speaker, but all those present” (Sudjic, 2001).



Athenian Pnyx
Sudjic (2001)

Greek city-states – such as Athens – governed themselves, this meant that though a large assembly, it was possible for every eligible person to attend. As populations grew and where it was not possible to convene the citizenry, representative speakers were chosen on their merit as a speaker. “The best orator was considered to be the best citizen” (Sudjic, 2001).

The semi-circular layout of the Pnyx permitted every person to hear and see the speaker while a complete circular layout – though more symbolically equal or democratic disadvantaged some spectators. For “those behind the speaker would have a forfeited view ... it was deemed important not just to hear the words of the speaker but to judge the totality of the performance and of the character who advanced an argument” (Buchanan, 2000).

The symbolism of meetings being held in the open air, against a “panoramic backdrop” is inherently exoteric; honesty, openness and answerability.

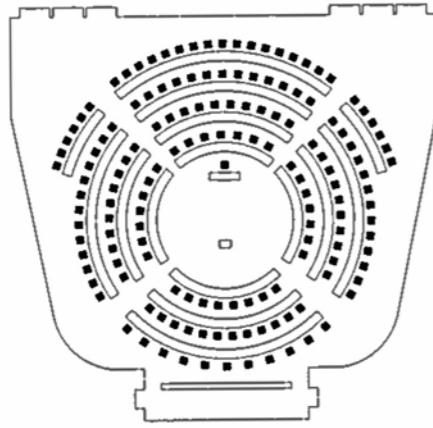
“The architecture of spaces of political congregation is not only an abstract expression of political culture, it also shapes this culture.

Whether members of parliament are positioned at sword’s length across from each other in the British House of Commons, in successive rows such as in the Brazilian Camara dos Deputados, or in comfortable revolving chairs such as in the Dutch House of Representatives, the debate will unfold in a totally different atmosphere. Architecture affects the political culture that is shaped in these settings.”

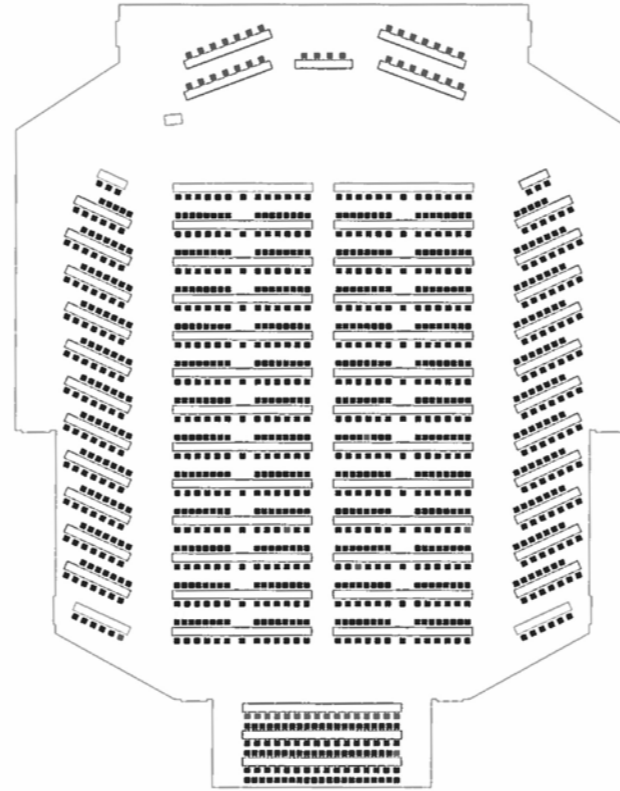
XML (2016)

“There are only five types of settings, ... the opposing benches, derived from the medieval royal court, the Neoclassicist semicircle of 19th century European nation states, the horseshoe that is a hybrid of the previous two, the more rare typology in the form of a circle and finally the classroom, most commonly found in Authoritarian countries.”

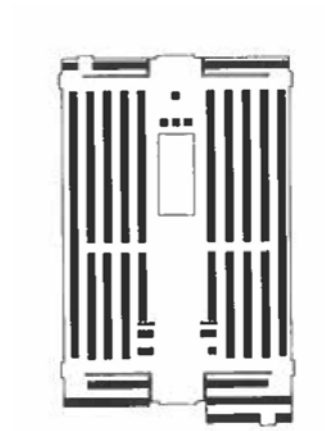
XML (2016)



Circle
 Example Slovenia
 Seats 90

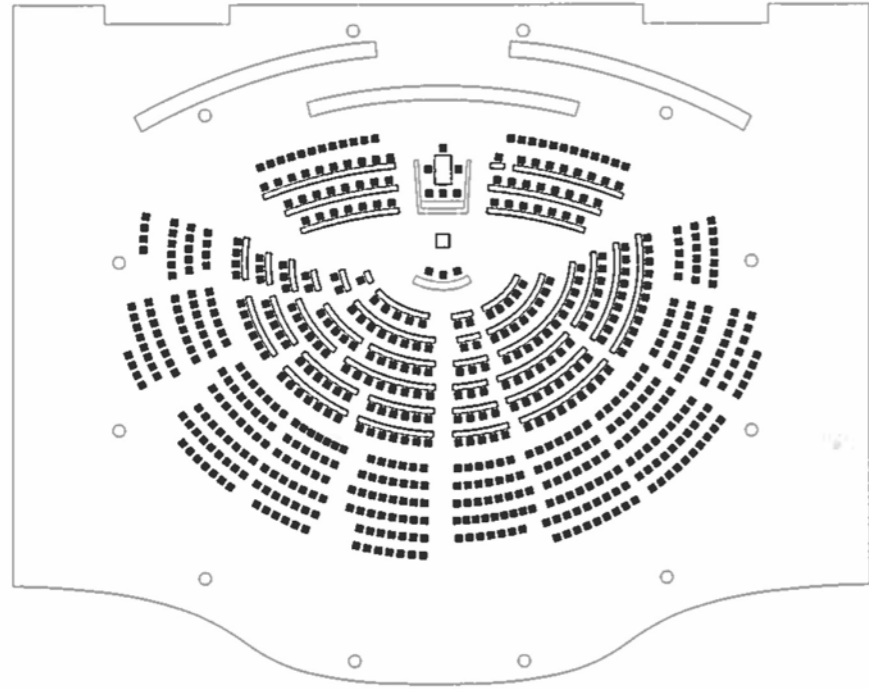


Classroom
 Example Cuba
 Seats 650



Opposing Benches
 Example United Kingdom
 Seats 650

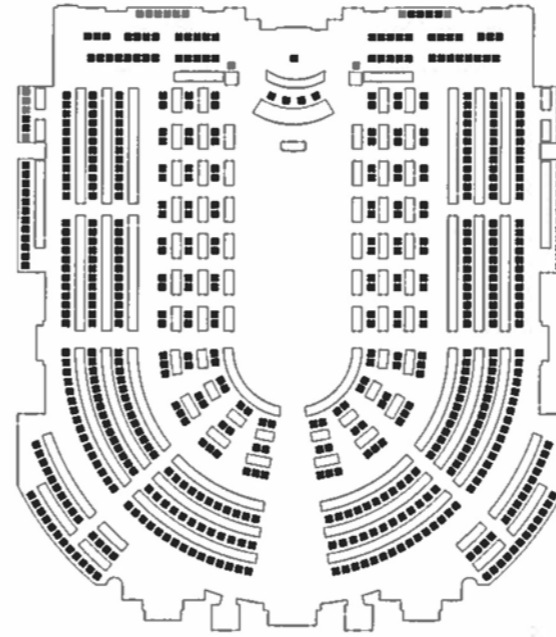
40 Chamber Typologies



Semicircle

Example Germany

Seats 598



Horseshoe

Example South Africa

Seats 400

41 Chamber Typologies

42 Chambers

830 m²

The debating chambers are essential to democracy and the Palace of Westminster is no different, the chambers for the two houses face one another across the Central Hall and each have division lobbies (where MPs vote by their physical presence) alongside.

The Parliament of the United Kingdom has traditionally used an opposing benches layout however the semi-circular layout is favoured by the majority of democratic nations.

Transparency is key to the debating chambers with modern parliaments having larger viewing galleries accessible for both brief and full viewing of debates.



House of Lords
Catherine Bebbington (2010)



House of Commons
Catherine Bebbington (2010)



Precedent:
Reichstag
Norman Foster
AJBL (n.d.)



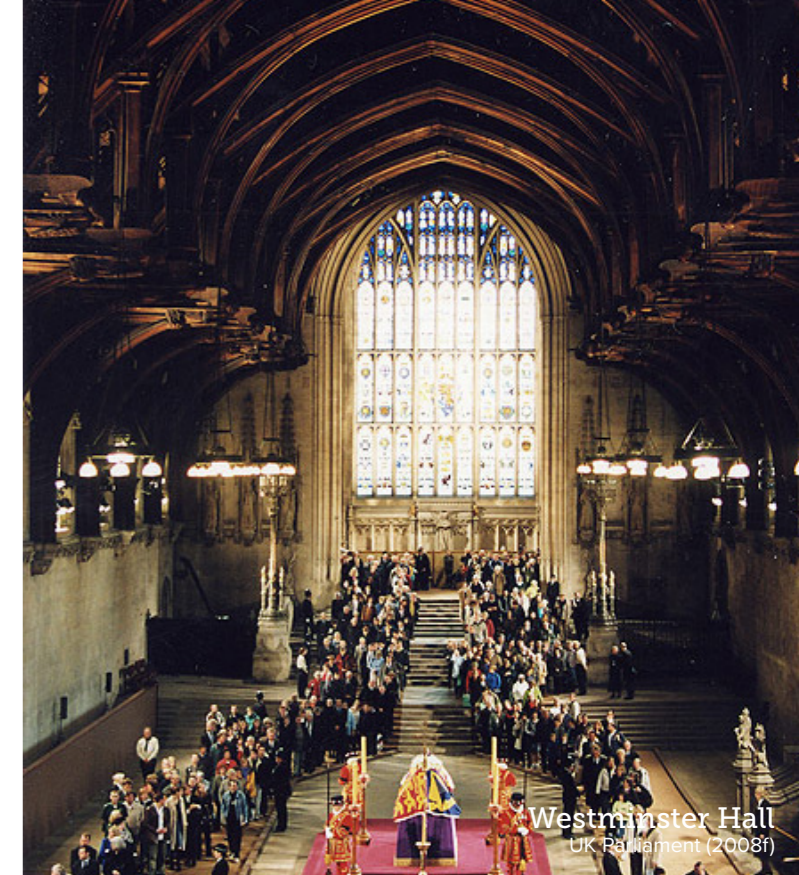
Precedent:
Scottish Parliament
EMBT
Adam Elder (2004)

43 Ceremonial

3500 m²

Around 14% of the usable space in the Palace of Westminster is ceremonial space. Among others this includes the Queen's Robing Room and Royal Gallery which are used by the monarch during the State Opening of Parliament ceremony and Westminster Hall.

Throughout the year these rooms are used for notable occasions such as to host visiting dignitaries from both foreign and commonwealth states. According to Joint Committee on the Palace of Westminster (2016) these spaces will not need to be replicated in a relocated parliament.



44 Residential

1800 m²

Around 6% of the usable space in the Palace of Westminster is residential and domestic service space. A number of prestigious positions in Parliament include the benefit of an official residence within the Palace. These include the Speaker of the House residing in Speaker's Tower and the Lord Chancellor.

While it will not be necessary to relocate these residences in a relocated parliament, provision should be made for alternative accommodation nearby. The vacant ministerial flats in Admiralty House (House of Commons Library, 2016) may prove suitable for this purpose.



45 Parliamentary Archives

5.5 miles of shelving

“The Parliamentary Archives hold over three million records, dating from 1497. There are 64,000 Acts of Parliament – stretching back to the 15th century. Up to 1849 they were written in rolls on goat or sheep skin parchment. From 1849 they have been printed as booklets, also on parchment.”

www.parliament.uk (n.d.-c)

The archives are stored on 5.5 miles of shelving in the Victoria Tower which was refurbished with air conditioning and environmental controls between 2000 and 2004. The records are accessible to the public via the search-room.



The Original Act Room
Parliamentary Archives
UK Parliament (2008)



Victoria Tower
UK Parliament (2008)

The Archives Accommodation Programme is currently investigating the possibility of relocating the archives “to better protect these nationally-important collections, provide greater public access, and promote a greater understanding of Parliament and its history by widening access to its heritage collections” Houses of Parliament Parliamentary Archives (n.d.)

46 Parliamentary Education Centre

1000 m² of temporary space

In 2014 a temporary Parliamentary Education Centre designed by Feilden + Mawson was built on Victoria Tower Gardens to accommodate school visits. The centre utilises augmented reality to create an immersive educational experience. The centre also provides dedicated lunch space, bag-storage and facilities for up to 100,000 student visitors per year.



Architects' Journal (2015)



Architects' Journal (2015)



Architects' Journal (2015)

47 Public Access

Over 1 million visitors per year

The Palace of Westminster “is not well designed or adapted for visitors. The Palace of Westminster welcomes over 1 million visitors a year, who come for a wide variety of reasons:

- attending committee meetings, either to give evidence or to watch proceedings;
- for business reasons, such as officials attending debates or participating in meetings (circa 3,000-4,000 per day);
- to see debates in the Chambers from the public galleries (circa 140,000 per year);
- visitors on free democratic access tours (circa 120,000 per year);

- constituents and other guests invited by Members of both Houses;
- school groups (circa 100,000 per year);
- researchers and other visitors to the Parliamentary Archives (circa 2,000 per year);
- people attending exhibitions and public engagement events;
- Elizabeth Tower tour groups (circa 11,000 per year);
- commercial tour visitors (circa 200,000-220,000 per year);
- visiting Heads of State and Heads of Government, ambassadors, members of other Parliaments and other senior figures from around the world; and
- guests attending functions and events.

Improvement to public access has been one of Parliament’s most important achievements in recent years. However, the Parliamentary Visitors Group noted that public access was not a central requirement of the original building,” and that as Parliament has increasingly opened its doors and its proceedings, “the challenges of access, security, heritage and conservation, ongoing maintenance, and visitor flow have become acute.

The problems can begin before visitors even enter the building. Oonagh Gay, former Head of the Parliament and Constitution Centre in the House of Commons Library, told us that the Palace was not currently configured to be welcoming to the public. She commented that there were often “long queues for access at the busiest entrance points,” and suggested that any development of the Palace “should be able to separate out much more easily those visiting the Palace for heritage reasons from those who wish to see or participate in democracy in action.”¹¹⁶ Professor Jonathan Drori CBE, Chairman of the Speaker’s Advisory Council on Public Engagement, also pointed out some of the physical limitations with the building:

Think about even the people who are invited to Parliament for semi-public events. These are the great and the good and you are asking them to stand in the rain for 20 minutes or more, and often longer. What hope for the rest? Compare that with some other places such as the Scottish Parliament, for example, or the Bundestag in Germany, which feel a lot more welcoming.”

Joint Committee on the Palace of Westminster (2016)

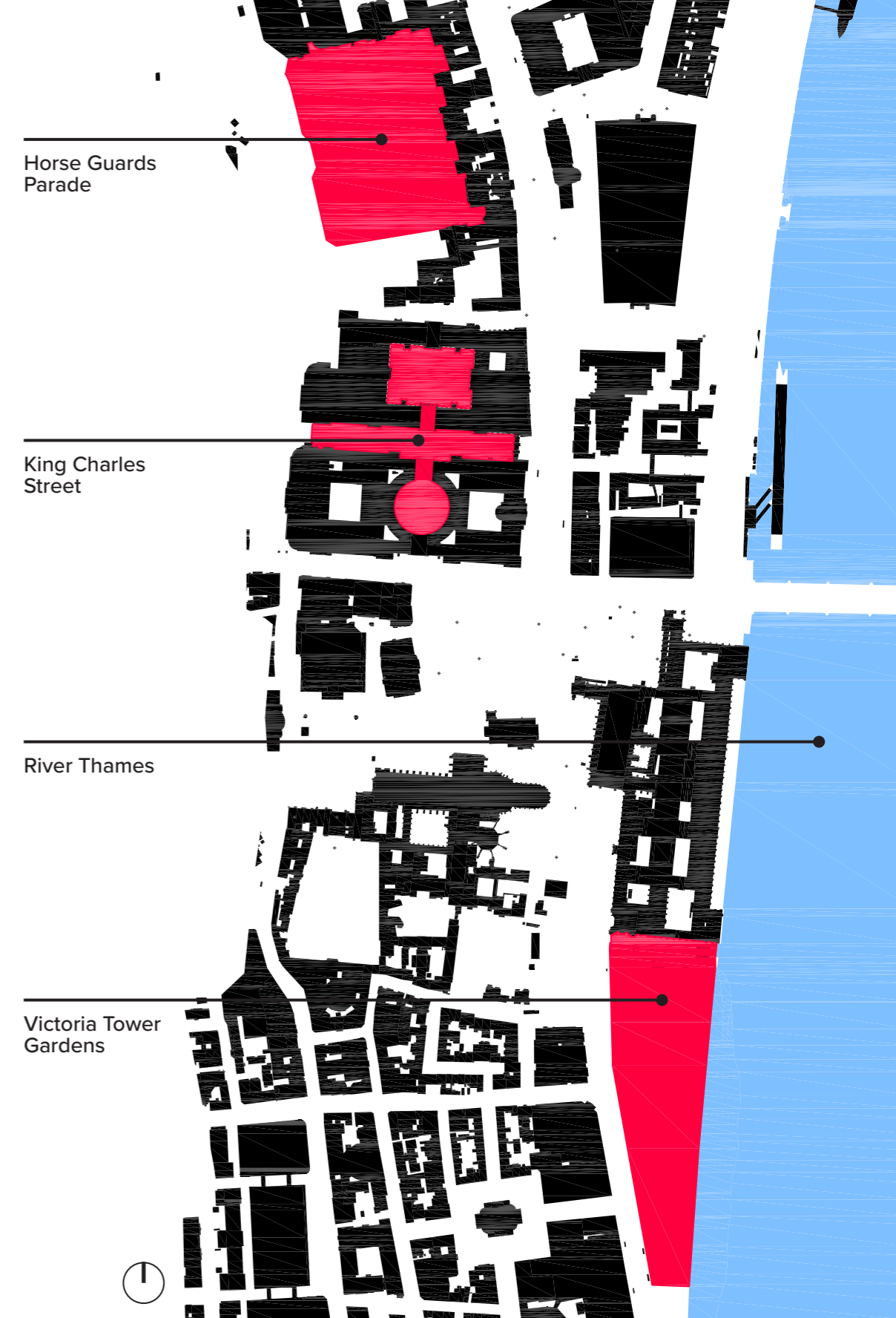
SITE

SITE INVESTIGATION, OPPORTUNITIES AND ANALYSIS

49 Whitehall Sites

Identifying sites for a relocated parliament

In their report on the restoration and refurbishment of the Palace of Westminster the Joint Committee on the Palace of Westminster (2016) identifies a variety of sites around Westminster which may be able to accommodate the House of Commons and Lords. Among which are Horse Guards Parade, The River Thames, Victoria Tower Gardens and King Charles Street.



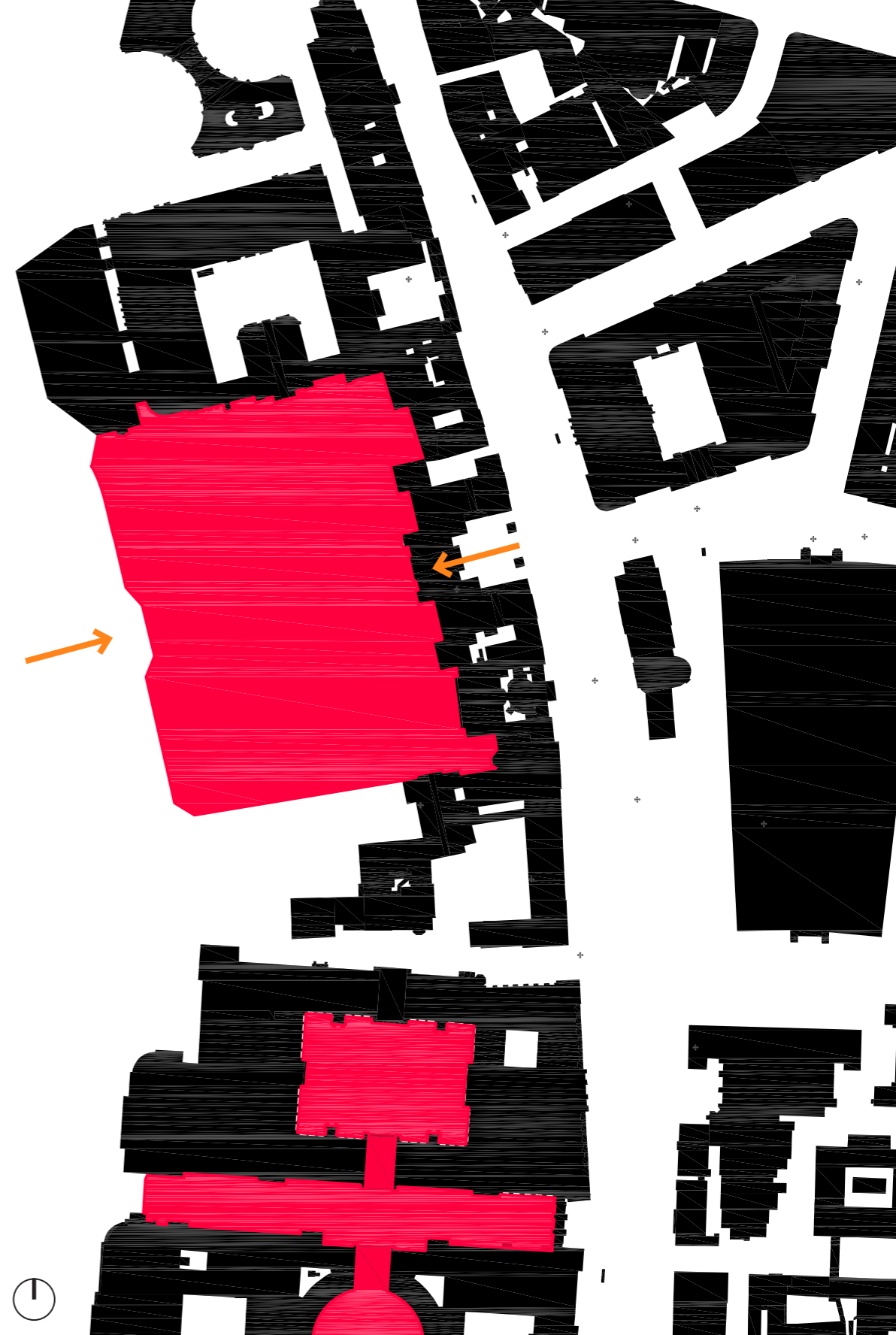
50

Horse Guards Parade

22,800 m² of parade ground

Horse Guards Parade is a ceremonial parade ground managed by the Royal Parks, which most notably host the annual Trooping the Colour on the Queen's official birthday in June.

Its western edge is bounded by Horse Guards Road and St James Park, the north is Old Admiralty and to the east are a number of government buildings and the Household Cavalry Museum through the arches beneath which Whitehall can be accessed. The backs of the houses on Downing Street are visible to the South with the Treasury towering above.





Gregg M. Erickson (2009)

Horse Guards Parade

22,800 m² of parade ground

For much of the late 20th century, Horse Guards Parade was used as a car park for senior civil servants and the park hosted the beach volleyball events during the London 2012 Olympics.

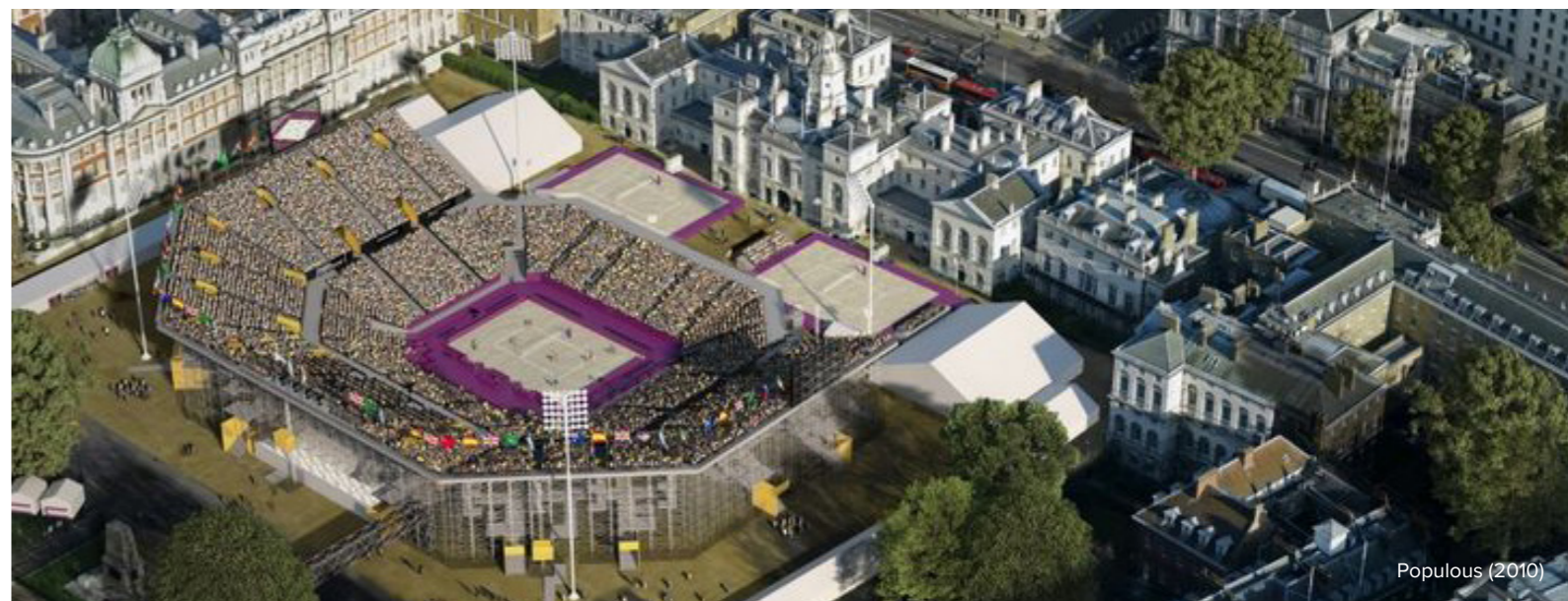
Although surrounded on 2.5 sides by government buildings a Parliament constructed on Horse Guards Parade would require a significant and costly security perimeter to be built in order to secure it from potential threats.



Paul Shaw (2014)



Mirrorpix (1972)



Populous (2010)

52

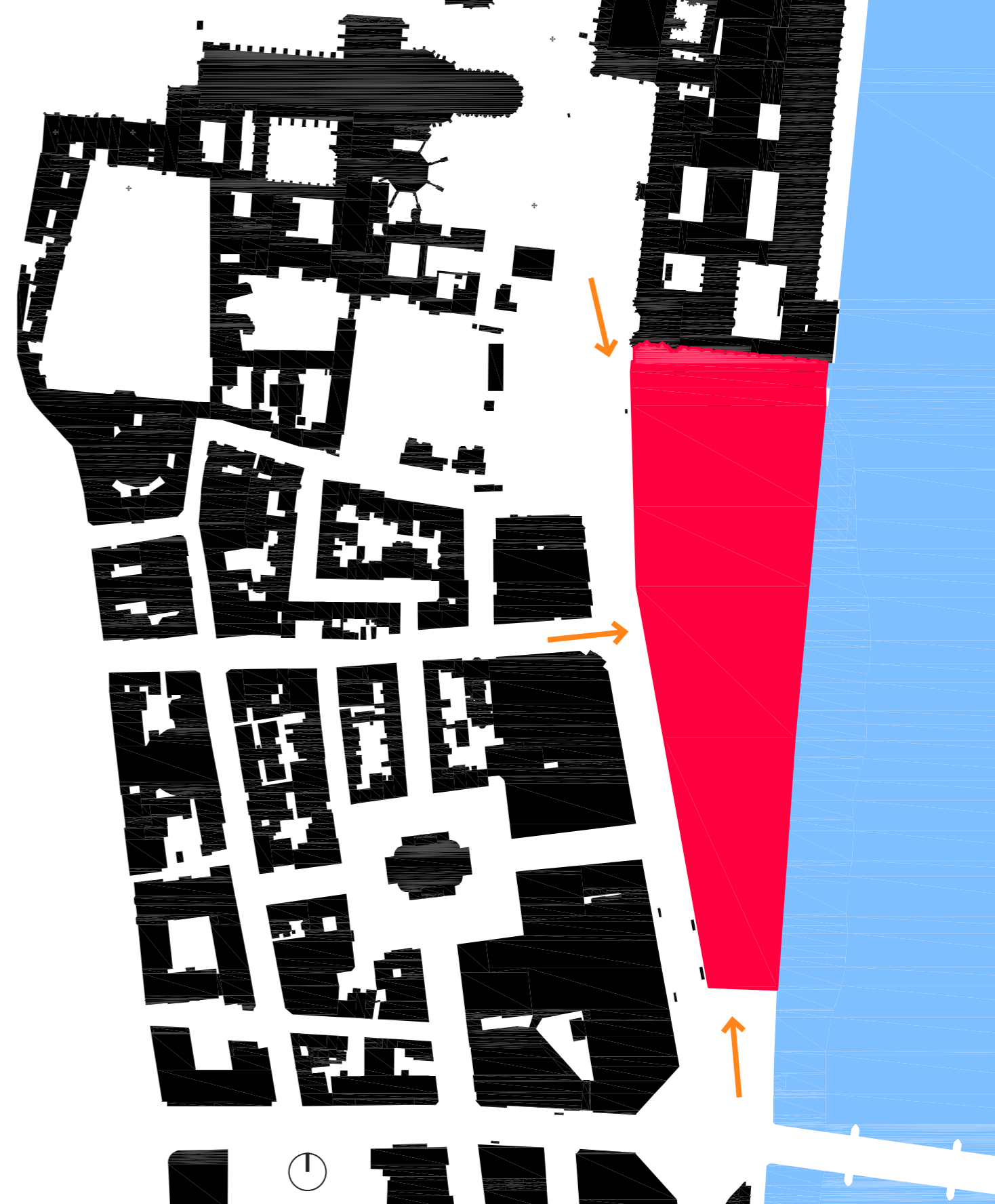
Victoria Tower Gardens

21,600 m² of park

To the south of the Palace of Westminster is Victoria Tower Gardens, a grass lawn surrounded by trees, beside the River Thames and managed by the Royal Parks.

In 2014 the temporary Parliamentary Education Centre was constructed on its northern edge and landscaping was introduced to minimise its visual impact.

Although ideally situated the site, much like Horse Guards Parade, would require a significant amount of construction to create a secure cordon around. Additionally the gardens will likely be required for construction facilities during the restoration programme.



53

The River Thames

A floating Parliament

The Joint Committee on the Palace of Westminster (2016) discounts the possibility of constructing a floating Parliament on the River Thames, mainly citing the challenges of securing such a site. But also the impact it would have on river traffic, and the necessity of access through the Palace or from Victoria Tower Gardens, both of which will be in use for construction work.



Davoud D. (2014)



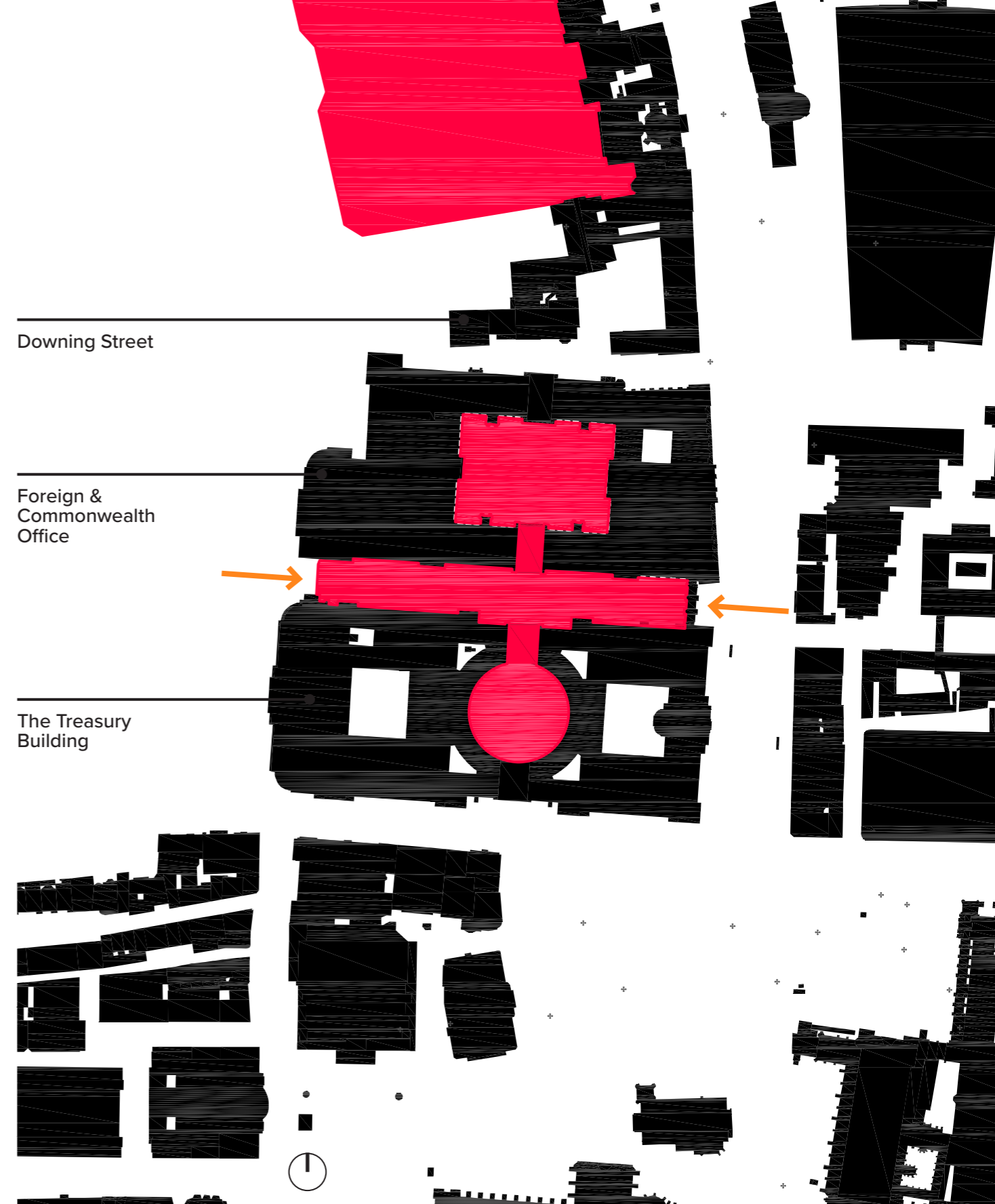
frisch-luft.ch (2013)

54 King Charles Street

10,200 m²

King Charles Street is situated between The Treasury building and the Foreign and Commonwealth Office and connects Whitehall to the east with Horse Guards Road to the west. The courtyards of both the Foreign and Commonwealth Office and the Treasury are accessible through arched gateways on both their northern and southern façades.

Unlike the other sites considered, the security of King Charles Street can be assured much more easily as it is sited between two government buildings, bordered by an arch to Whitehall to the east and a staircase to St James Park to the west. As such it is the most likely candidate for the situation of a relocated parliament in Whitehall.



55

King Charles Street Arch

1908 sculpted stone archway

J. M. Brydon was the architect of the King Charles Street Arch with the work completed by Henry Tanner and sculptures by William Silver Frith and Paul Raphael Montford.

A number of allegory are depicted in the sculpture work of the arch which is considered to be one of the last successful examples of New Sculpture architectural work.

George P. Landow (n.d.)



Robert Freidus (n.d.)



Robert Freidus (n.d.)



Government with her sceptre and classical building and History (or Literature) with pen and books
Robert Freidus (n.d.)



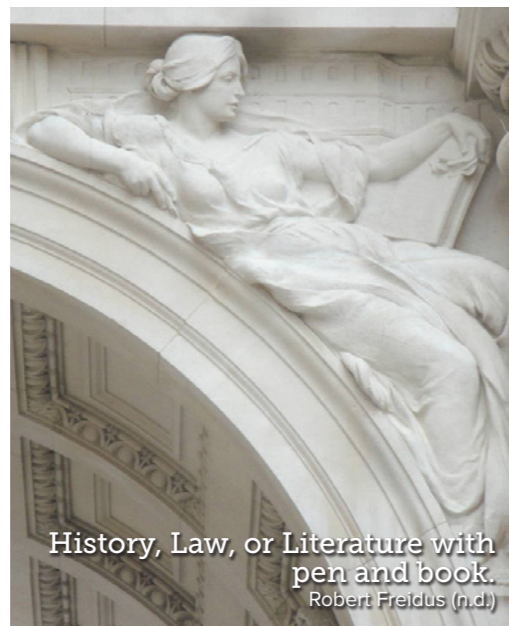
Industry with a wool or cotton spindle and a miner's pick and Justice cradling her sword and crumpled scale
Robert Freidus (n.d.)



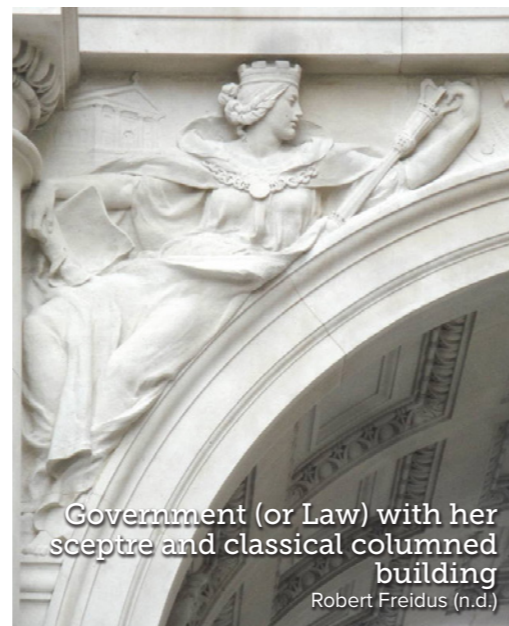
Geography with her map and Science with her chemical apparatus both accompanied by cherubs
Robert Freidus (n.d.)



Justice blindfolded with her sword and scales
Robert Freidus (n.d.)



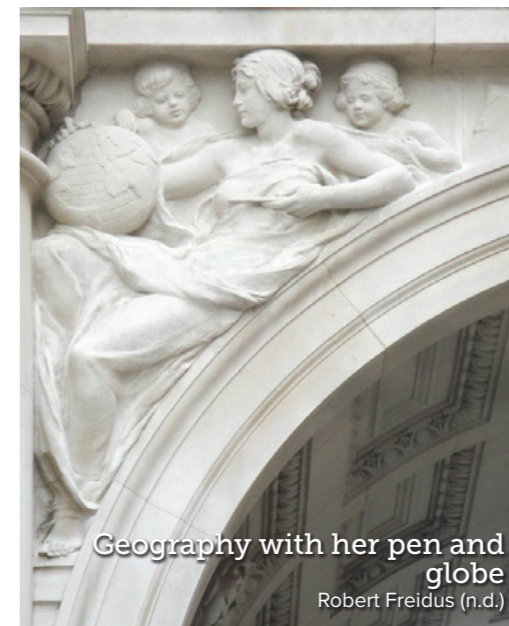
History, Law, or Literature with pen and book.
Robert Freidus (n.d.)



Government (or Law) with her sceptre and classical columned building
Robert Freidus (n.d.)



Shipping and Navigation represented by vessel, charts and books
Robert Freidus (n.d.)



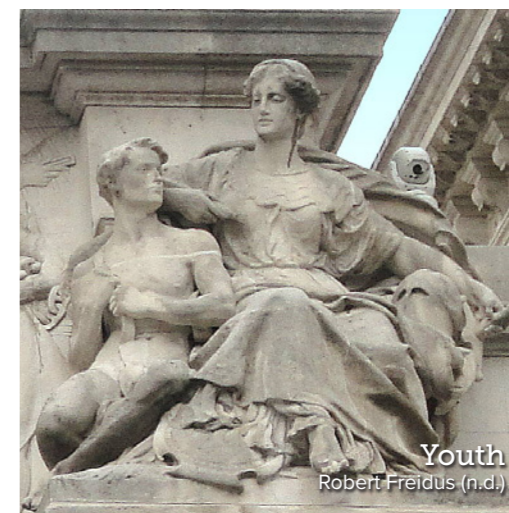
Geography with her pen and globe
Robert Freidus (n.d.)



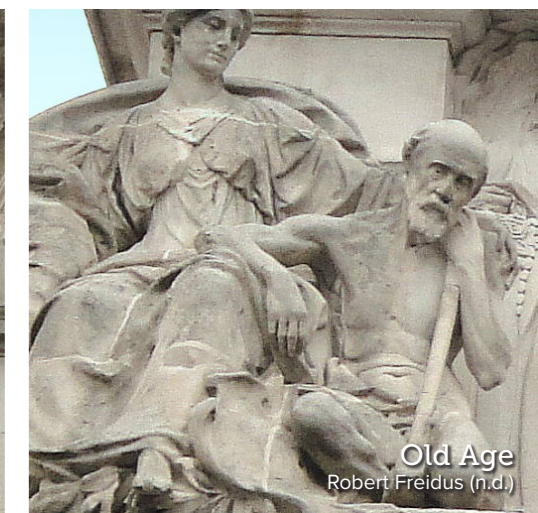
Science and technology, represented by chemical apparatus and steam locomotives
Robert Freidus (n.d.)

56

King Charles Street Arch Iconography

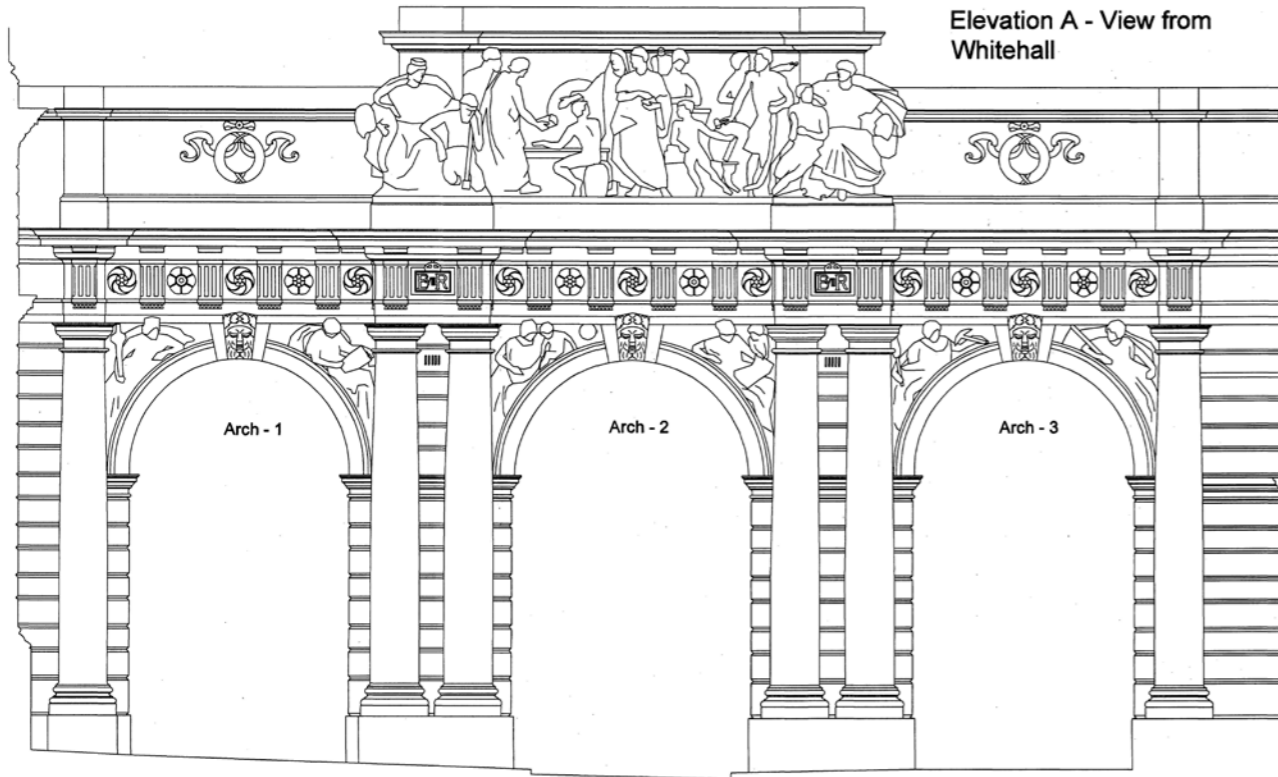


Youth
Robert Freidus (n.d.)

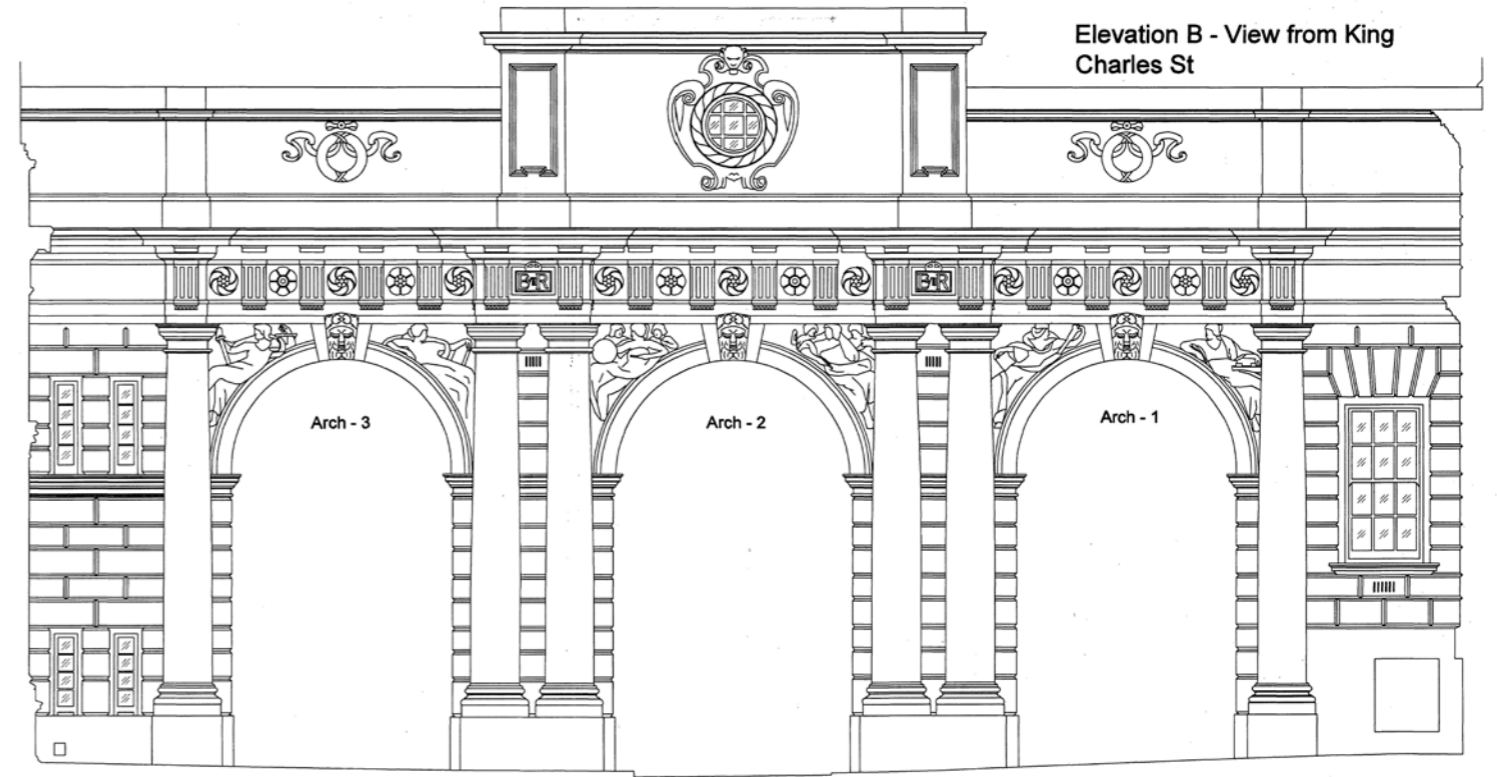


Old Age
Robert Freidus (n.d.)

Elevation A - View from Whitehall



Elevation B - View from King Charles St



57

King Charles Street Arch Elevations 1:125

58

The Treasury Building

Government Offices Great George Street (GOGGS)

1 Horse Guards Road “was designed and built between 1898 and 1917. It stands on the site of a number of narrow old streets cleared to make way for the building. Construction was in 2 phases. The Parliament Street (Whitehall) end was built first, completed in 1908. The aim was to build light, open-plan offices so offices were built around the perimeter walls of the building and around three large courtyards, while corridors were placed beside light-wells. An entrance on to the park was added in the second building phase, the St James’ Park end, between 1910 and 1917. In order to maximise floor space, offices were arranged either side

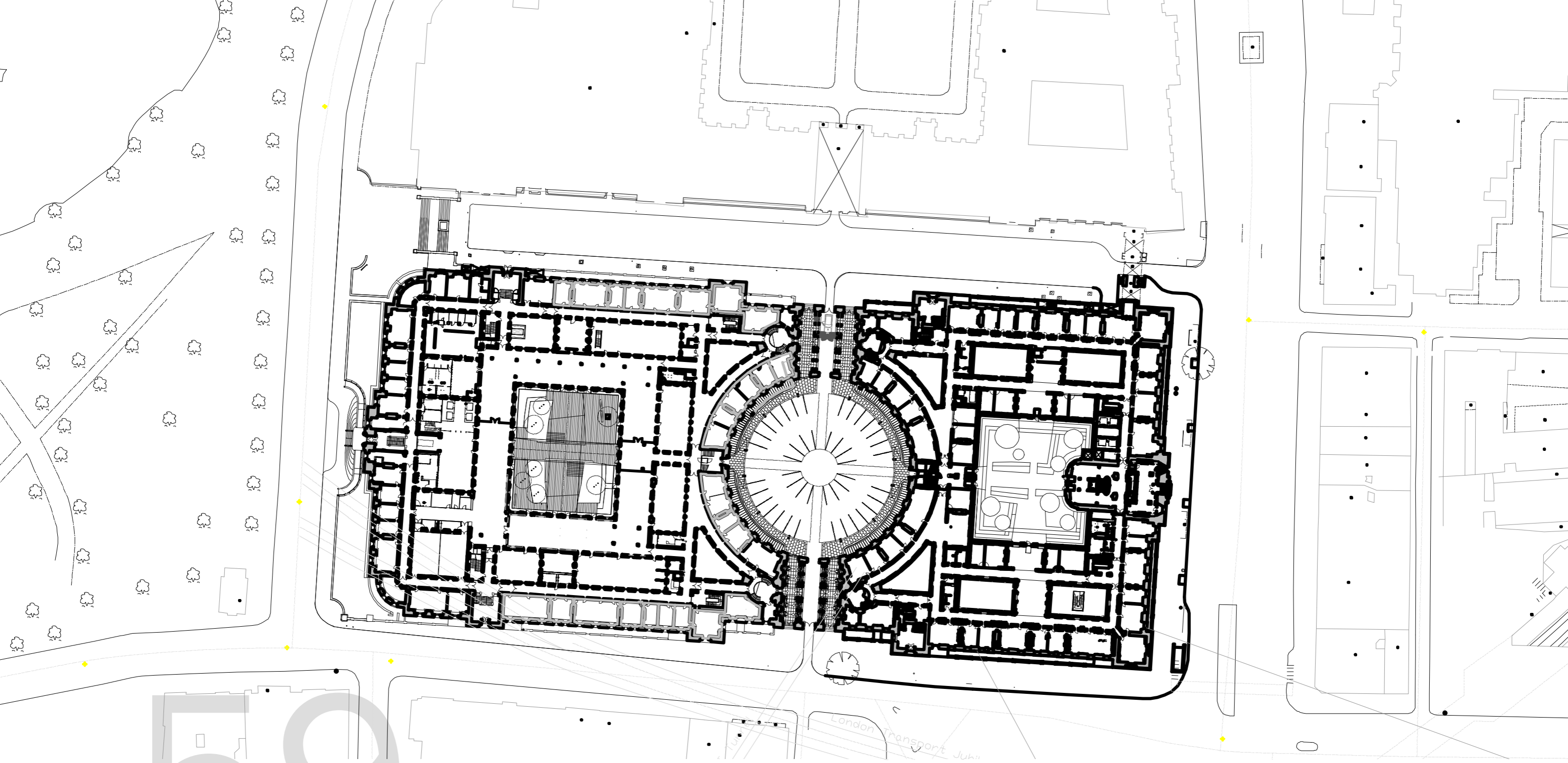
of dark internal corridors – the opposite of what had been intended.

The building is an island site bounded by Parliament Street, Great George Street, Horse Guards Road and King Charles Street. The principal architect was John Brydon, who was selected by the Minister of Works after a competition. Brydon’s early works include the Elizabeth Garrett Anderson Memorial Hospital, Chelsea Town Hall, the Victoria Art Gallery in Bath and an extension to the Bath Pump Room. In Bath, Brydon made use of the local stone – a feature he repeated in GOGGS, cladding it in Portland stone.



The large circular court in the middle of the building is derived from Inigo Jones’ design for a new Whitehall Palace (never built), and is a very distinctive piece of architecture. Brydon died before completion of the project and Sir Henry Tanner, the government’s Chief Architect of Works, took over. The architectural merit of the building was compromised by this change: in 1910 the Architectural Review said: “the intrusion of another hand less inspired than the original designer is plainly evident.” But the building has some architectural merit – it’s now Grade II* listed.”

GOV.UK (n.d.-a)

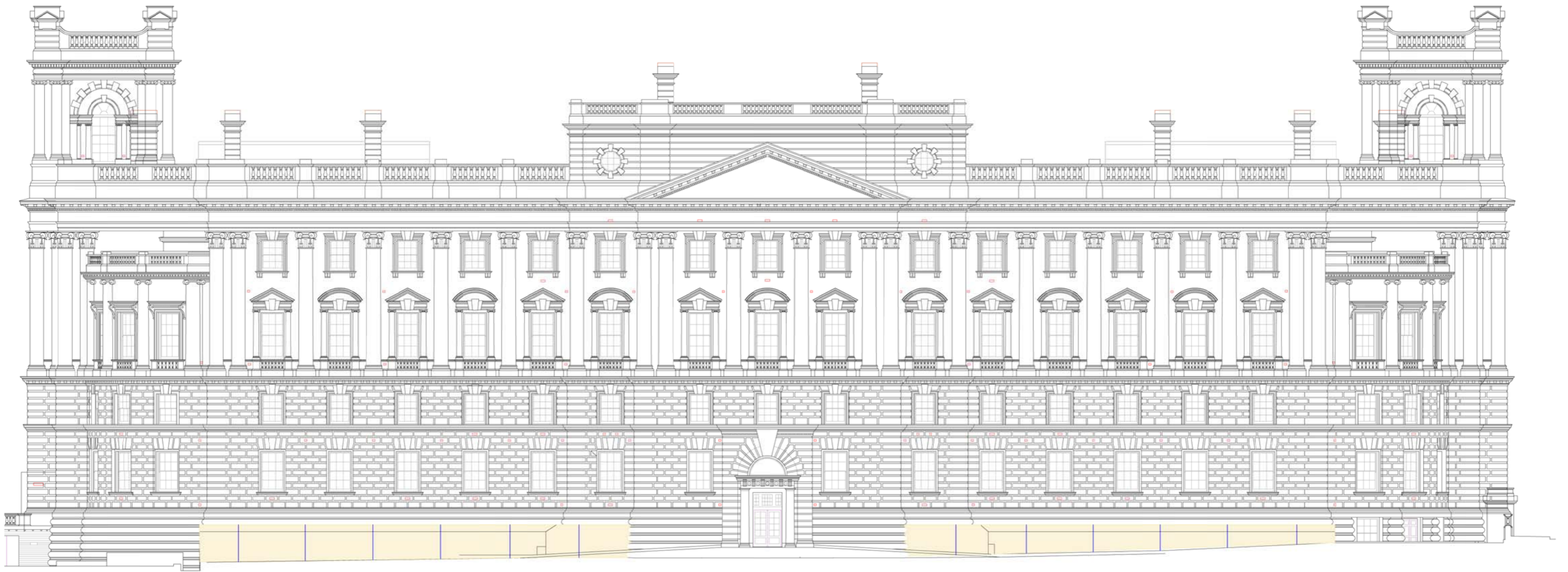


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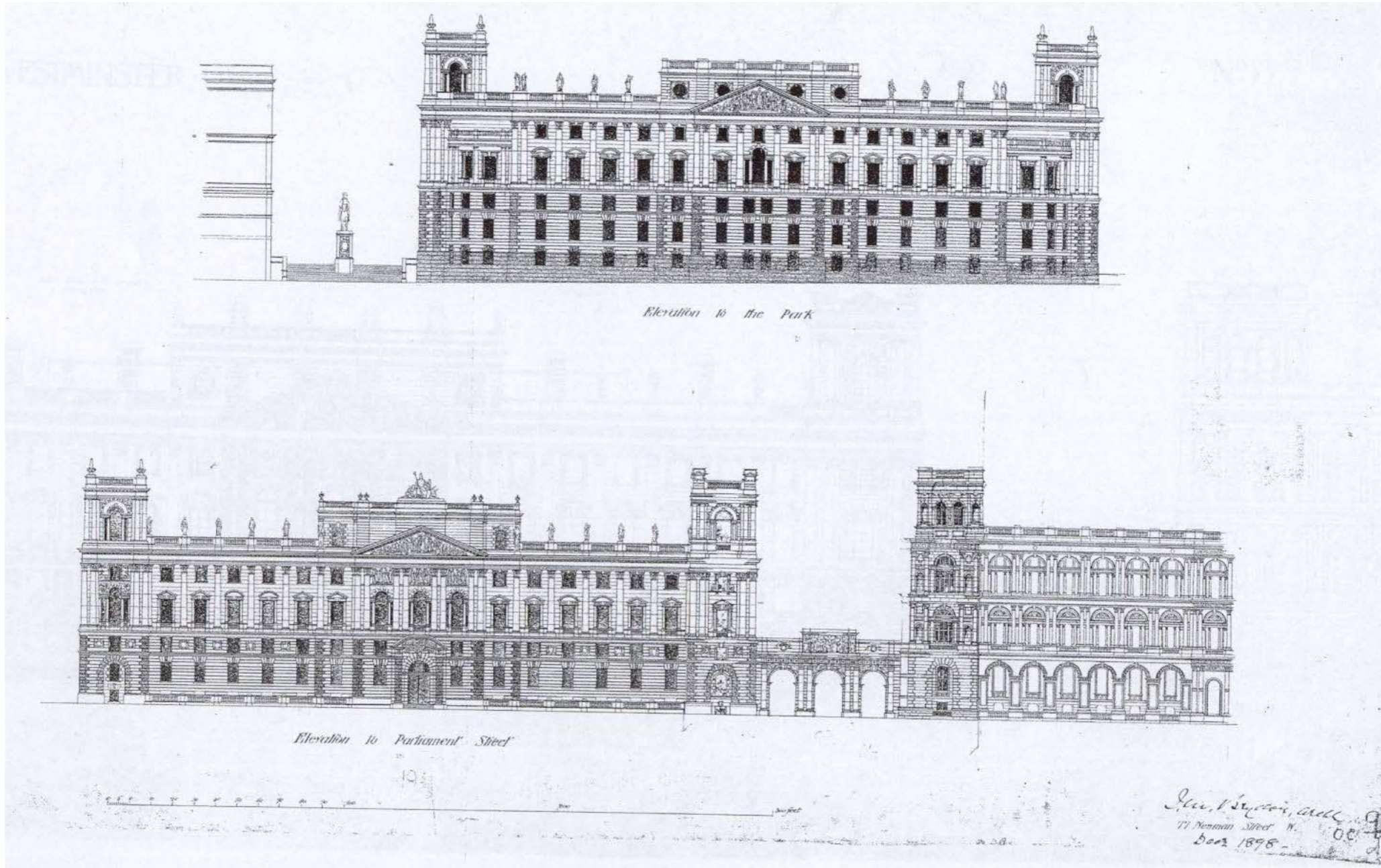
The Treasury Building

Ground Floor Plan 1:1000

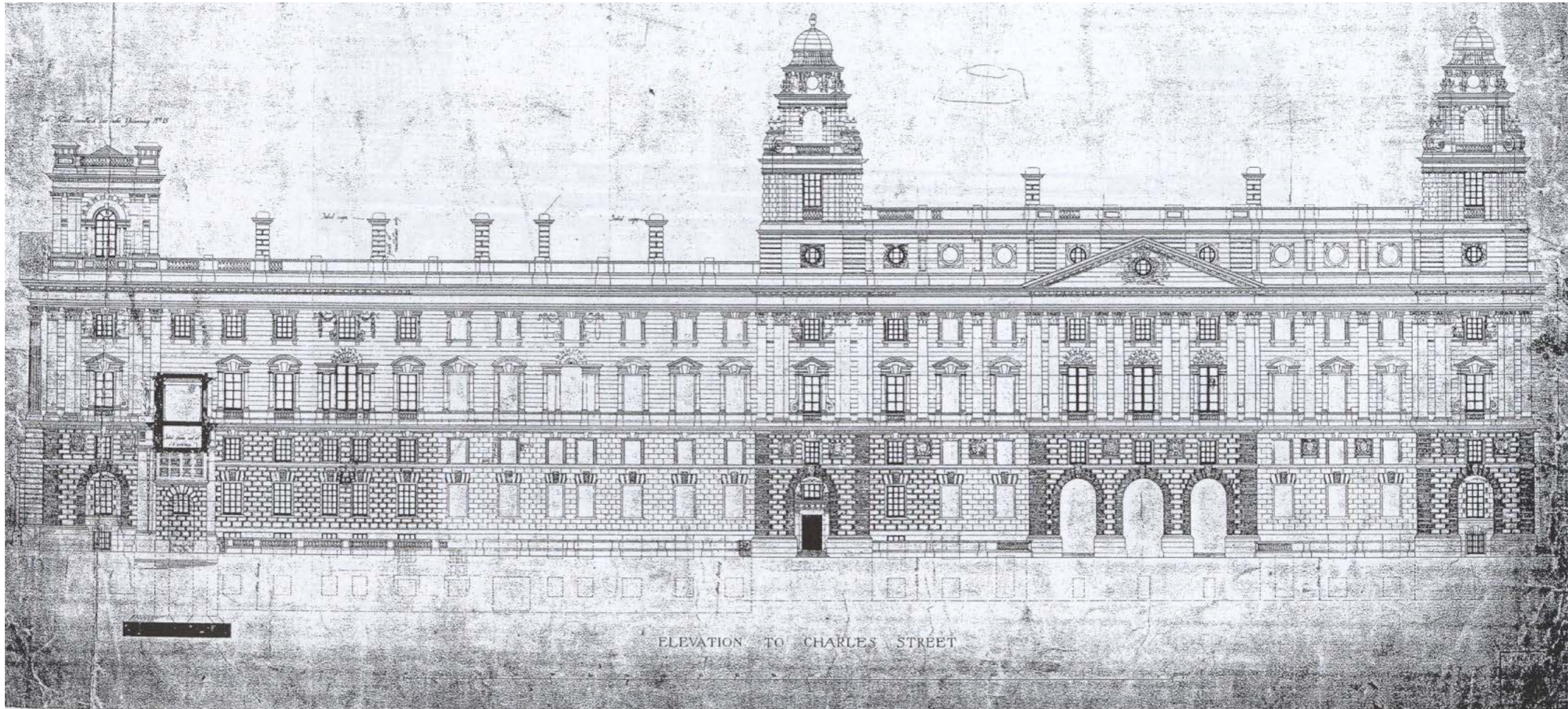




60 The Treasury Building West Elevation

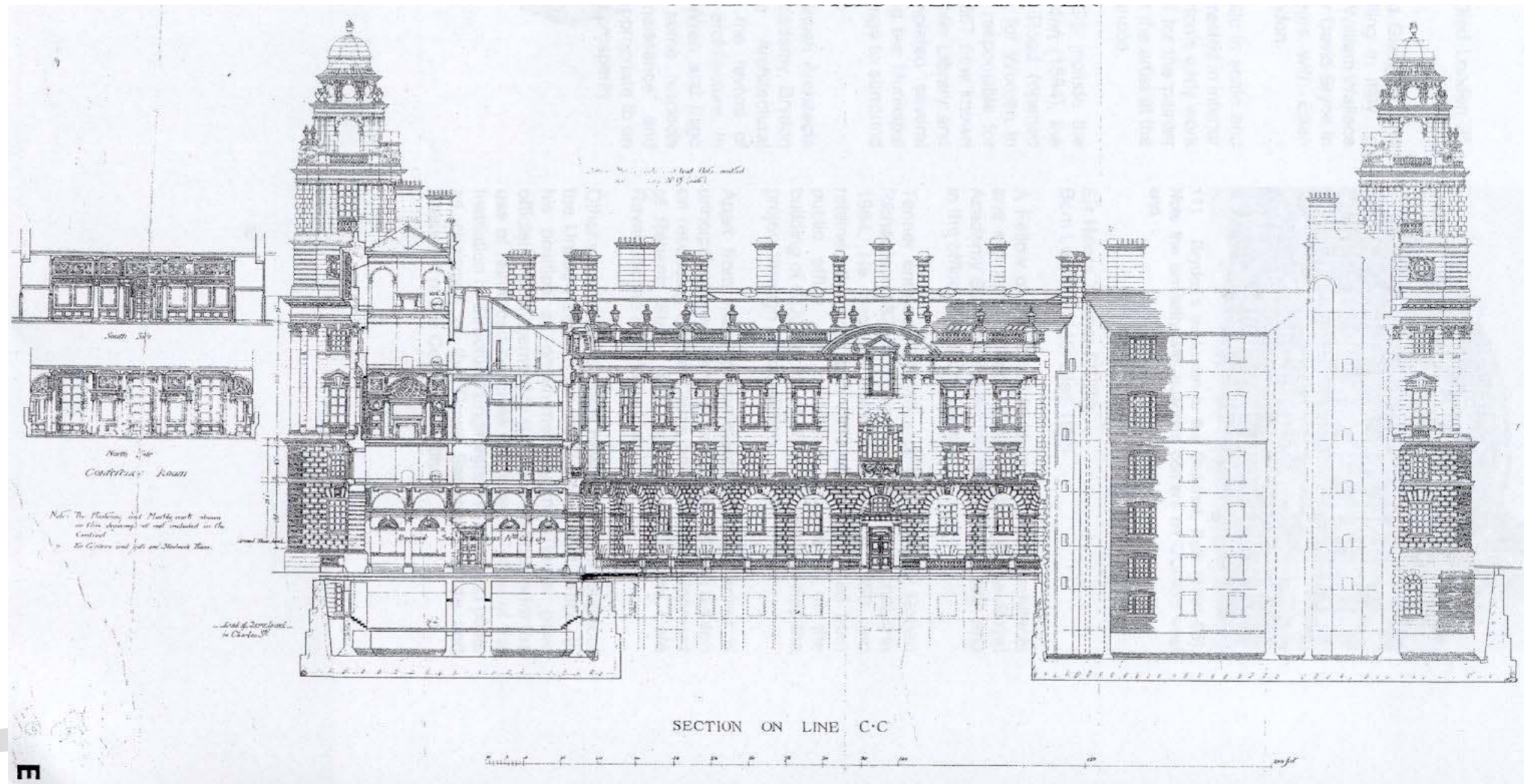


6 The Treasury Building Elevations West & East



The Treasury Building

North Elevation



The Treasury Building

Courtyard Section

64 Foreign & Commonwealth Office

1868 government offices

“The first Secretary of State for Foreign Affairs was appointed in March 1782, but the first purpose-built Foreign Office was not begun until 1861. It was completed in 1868 as part of the new block of government offices which included the India Office and later (1875) the Colonial and Home Offices.

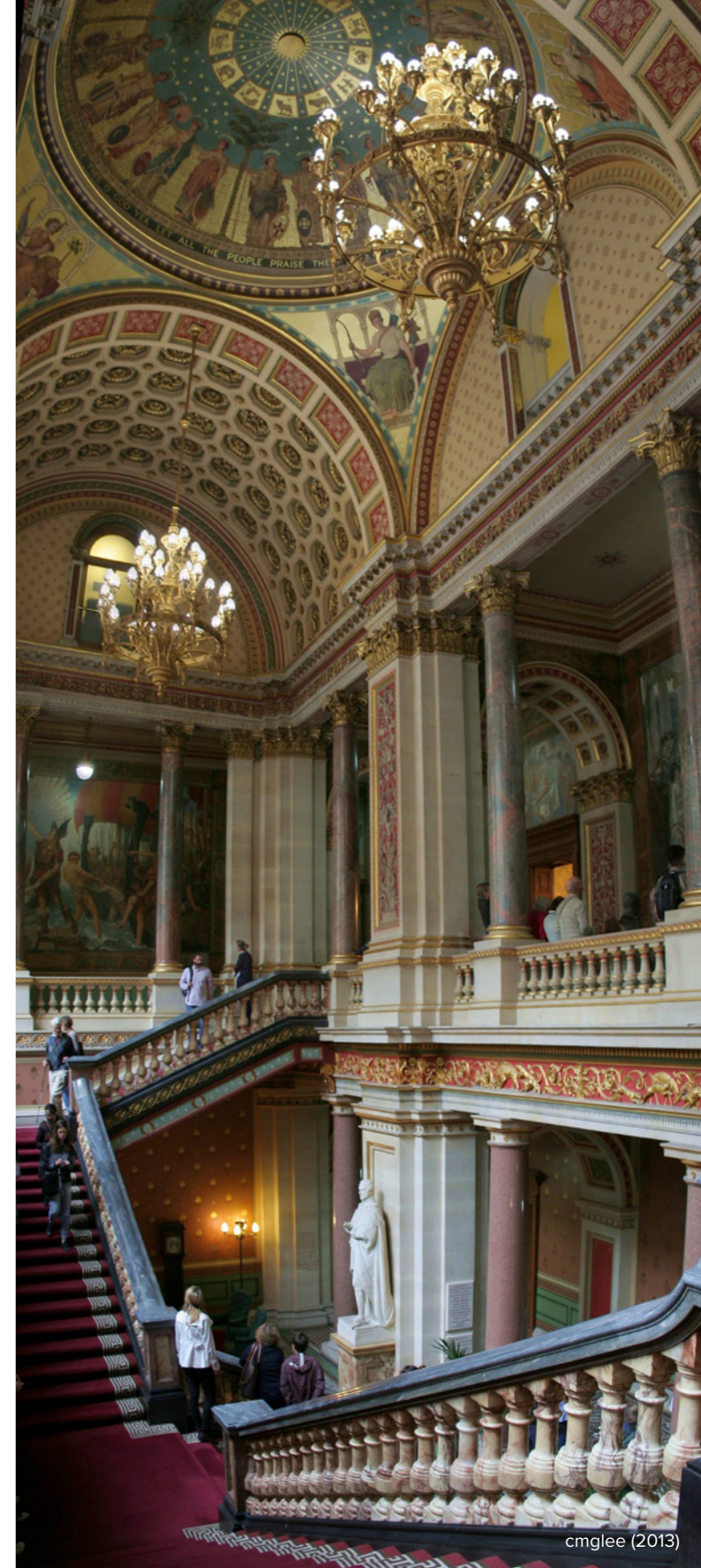
George Gilbert Scott was responsible for the overall classical design of these offices but he had an amicable partnership with Matthew Digby Wyatt, the India Office’s



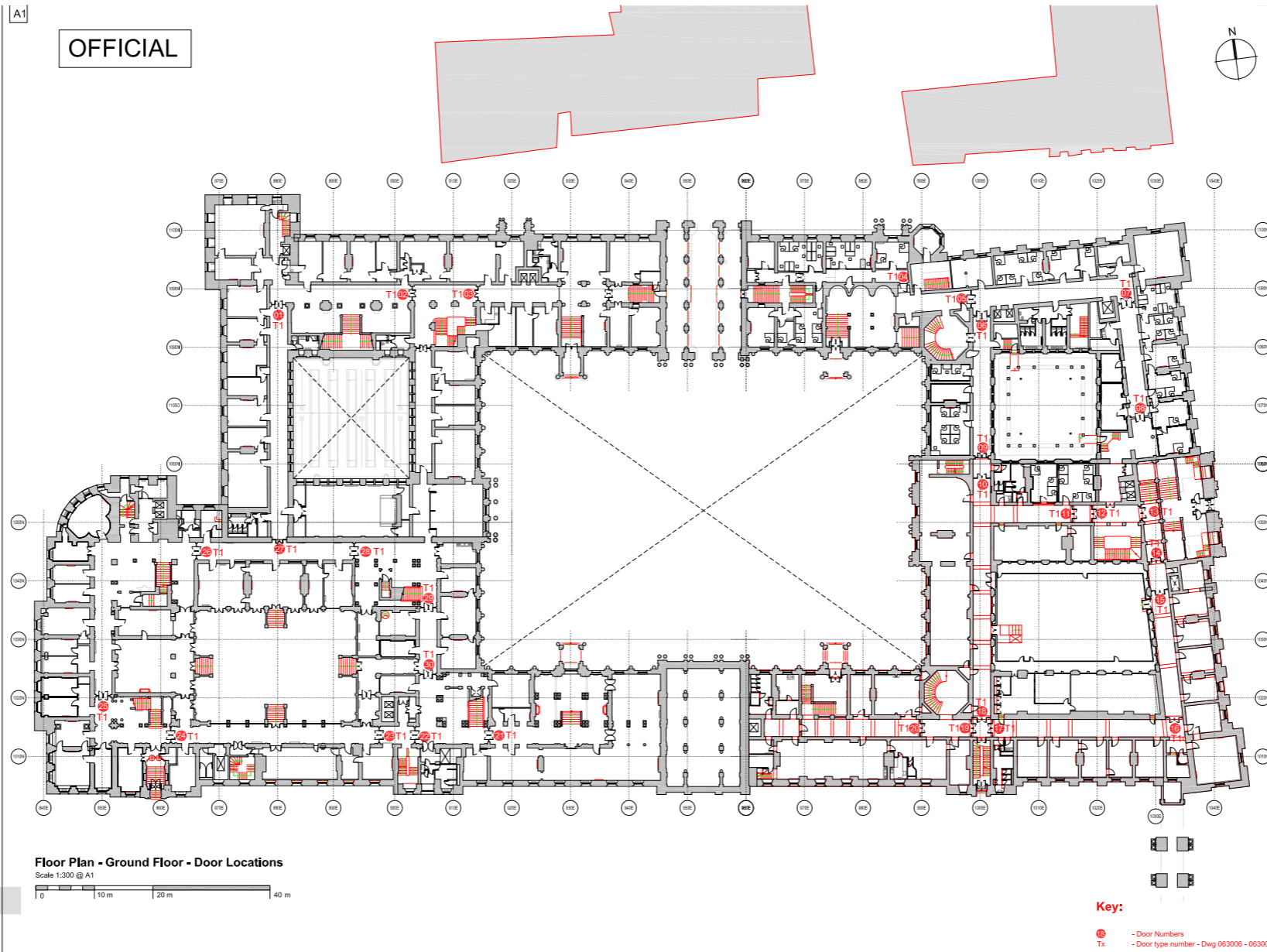
Adrian Pingstone (2005)

Surveyor, who designed and built the interior of the India Office.

Scott designed the new Foreign Office as ‘a kind of national palace or drawing room for the nation’ with the use of rich decoration to impress foreign visitors. The same was true of Wyatt’s India Office. The Colonial and Home Offices, however, were seen purely as working buildings and their interior decoration, by contrast, was ‘as plain as was compatible with a major department of state.’” GOV.UK (n.d.-b)

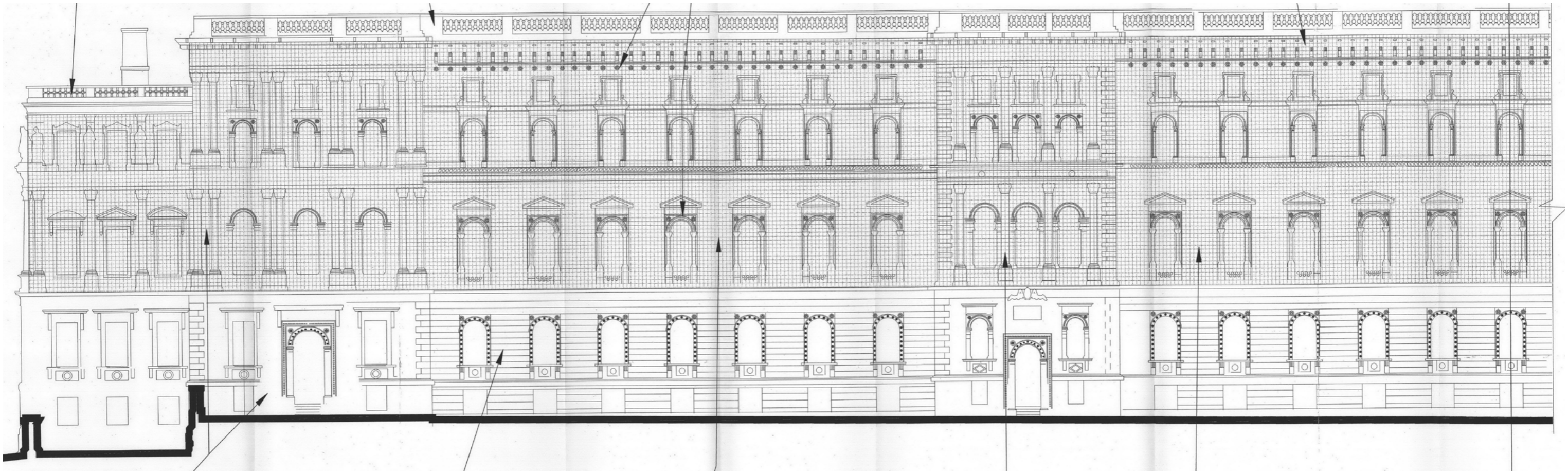


cmglee (2013)



65 Foreign & Commonwealth Office

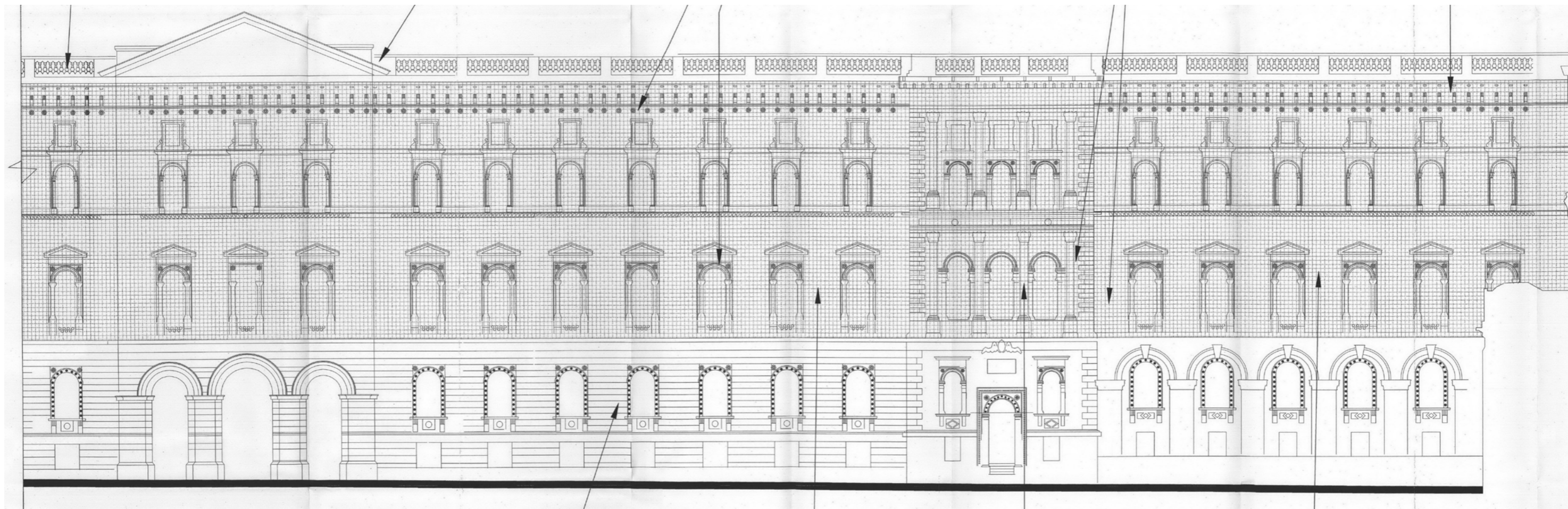
Ground Floor Plan 1:1000



66

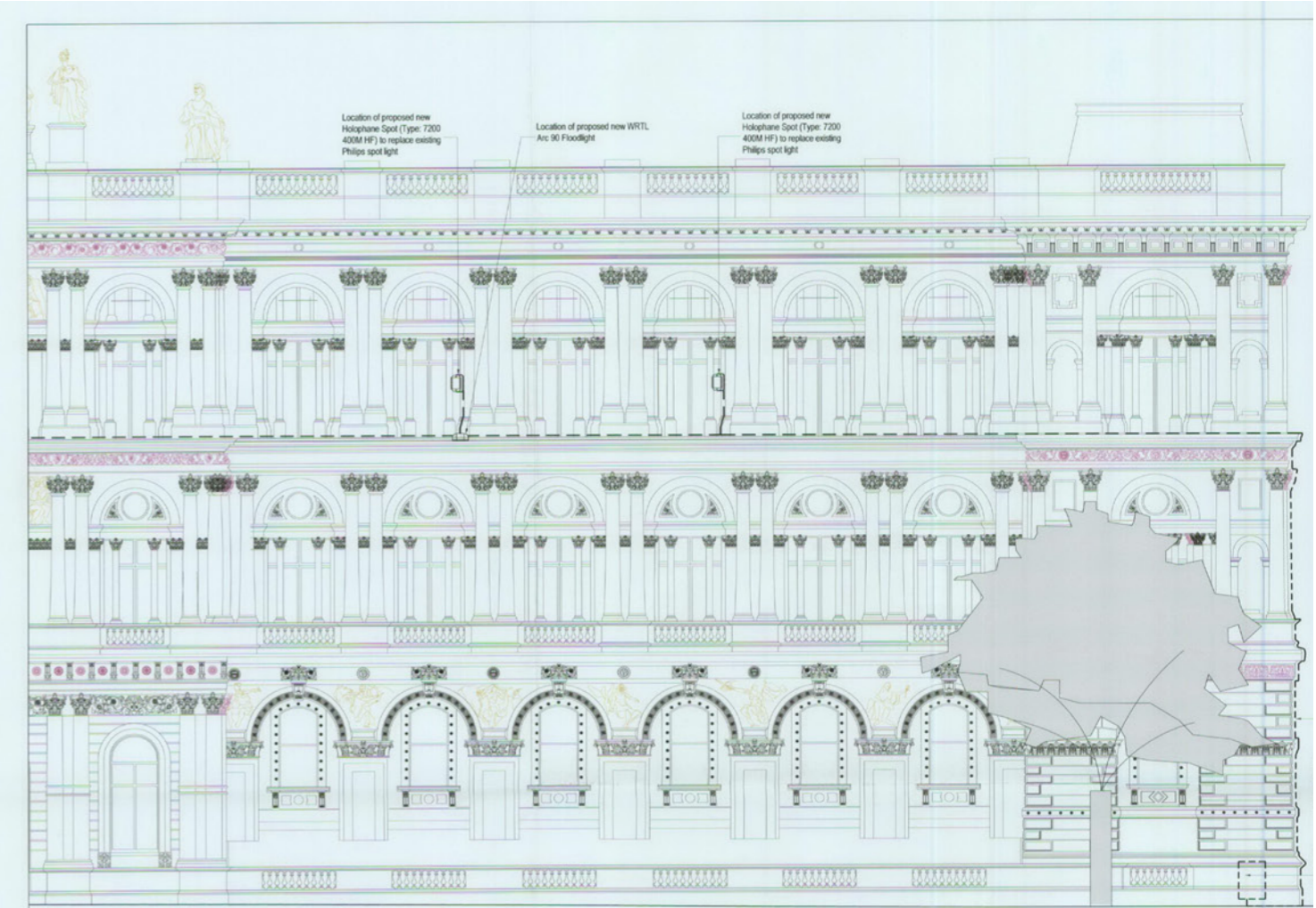
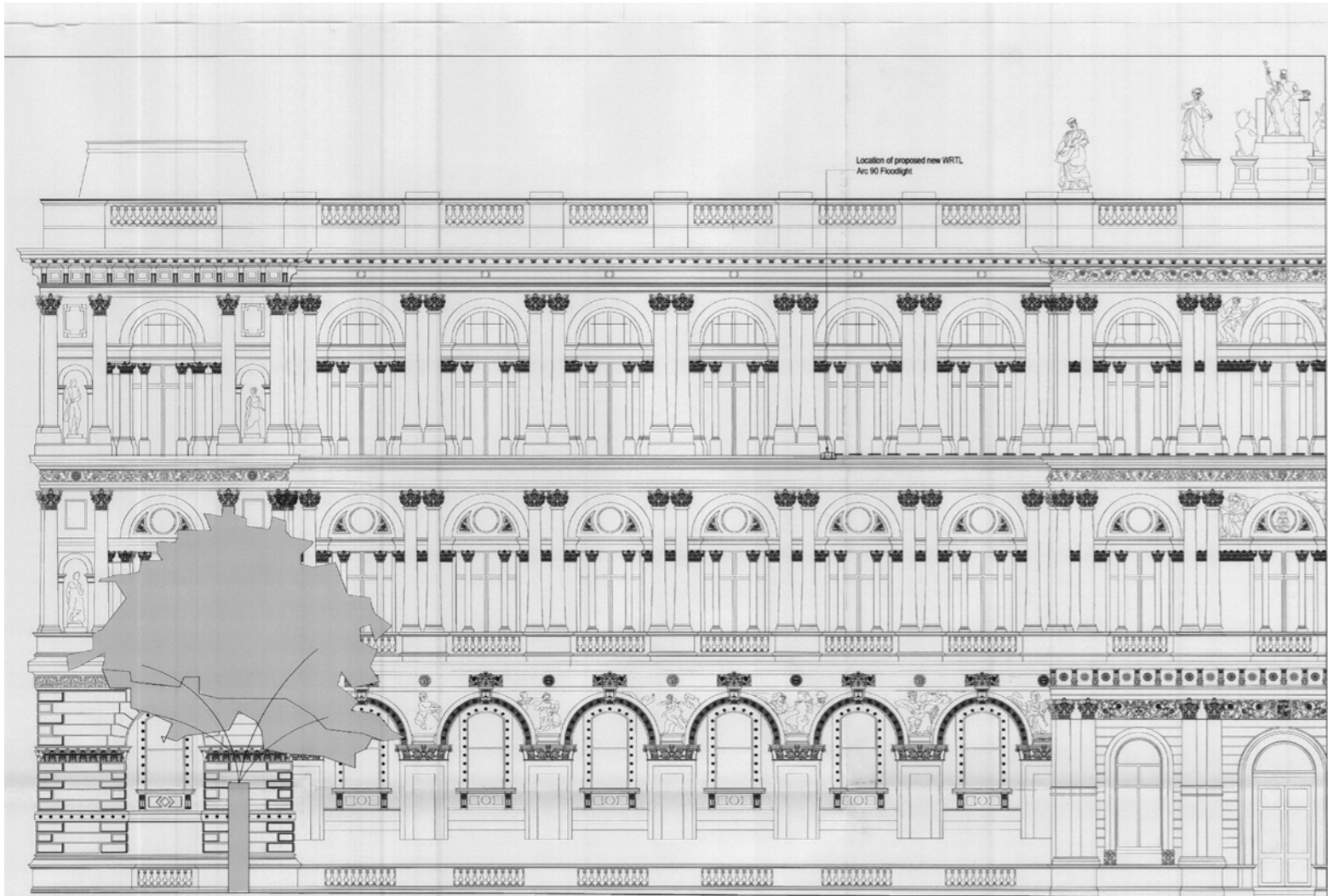
Foreign & Commonwealth Office South Elevation 1:250 (left)

Watts (2006b)



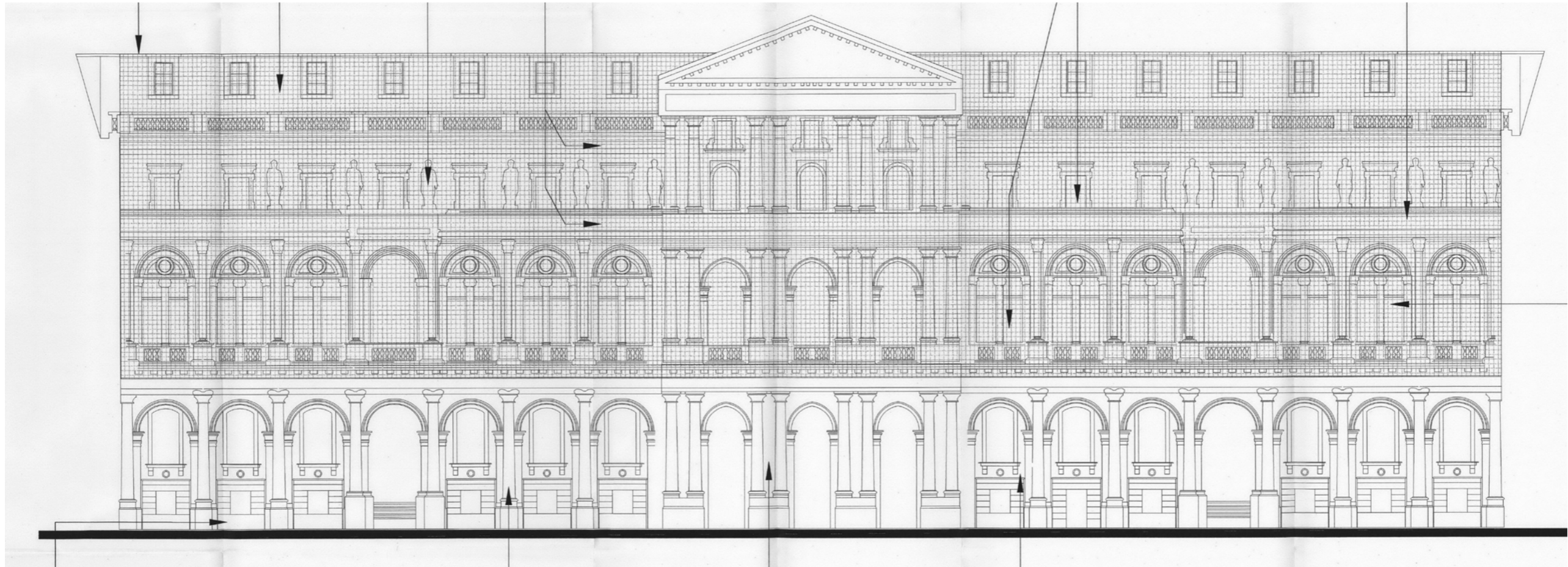
67

Foreign & Commonwealth Office South Elevation 1:250 (right)



68

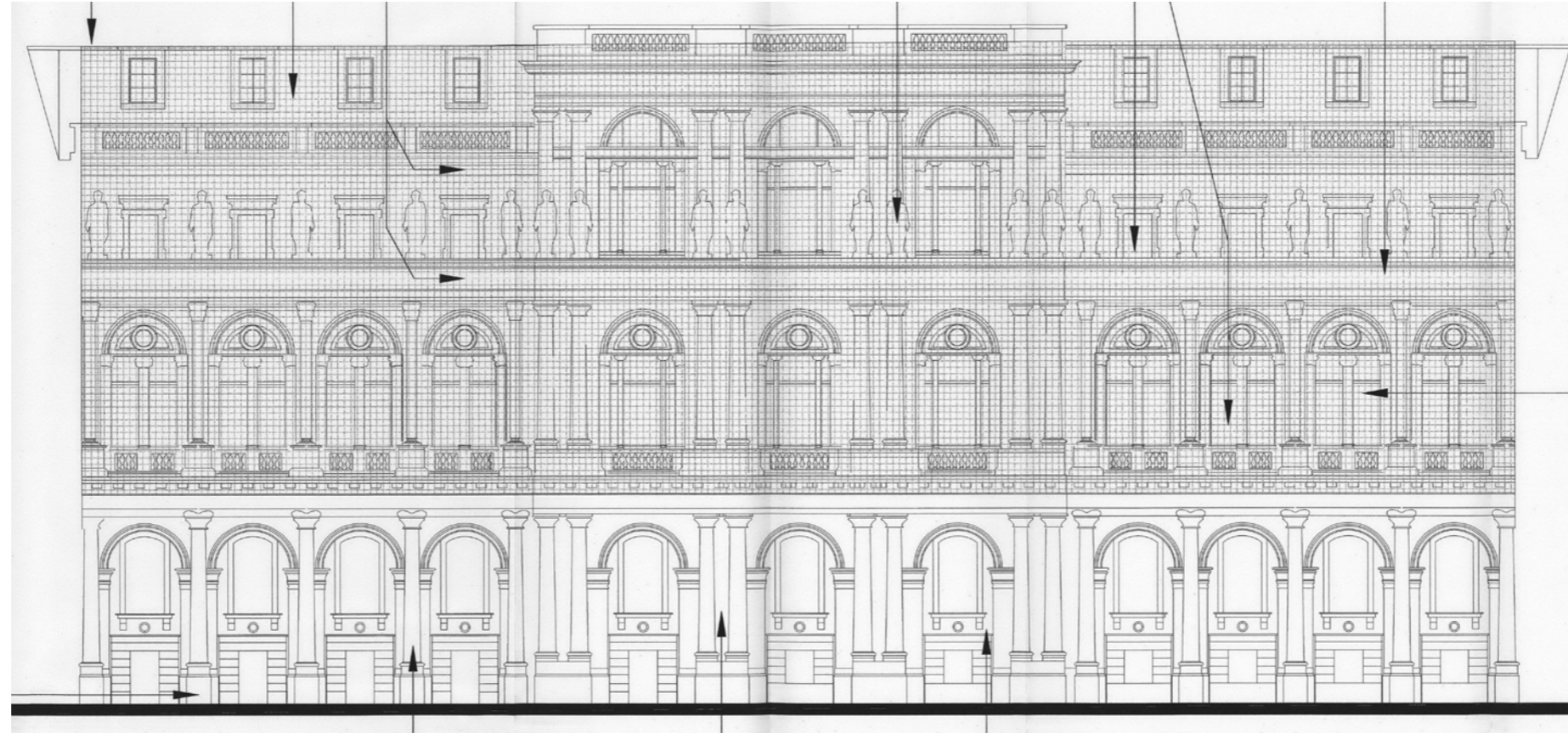
Foreign & Commonwealth Office East Elevation 1:250



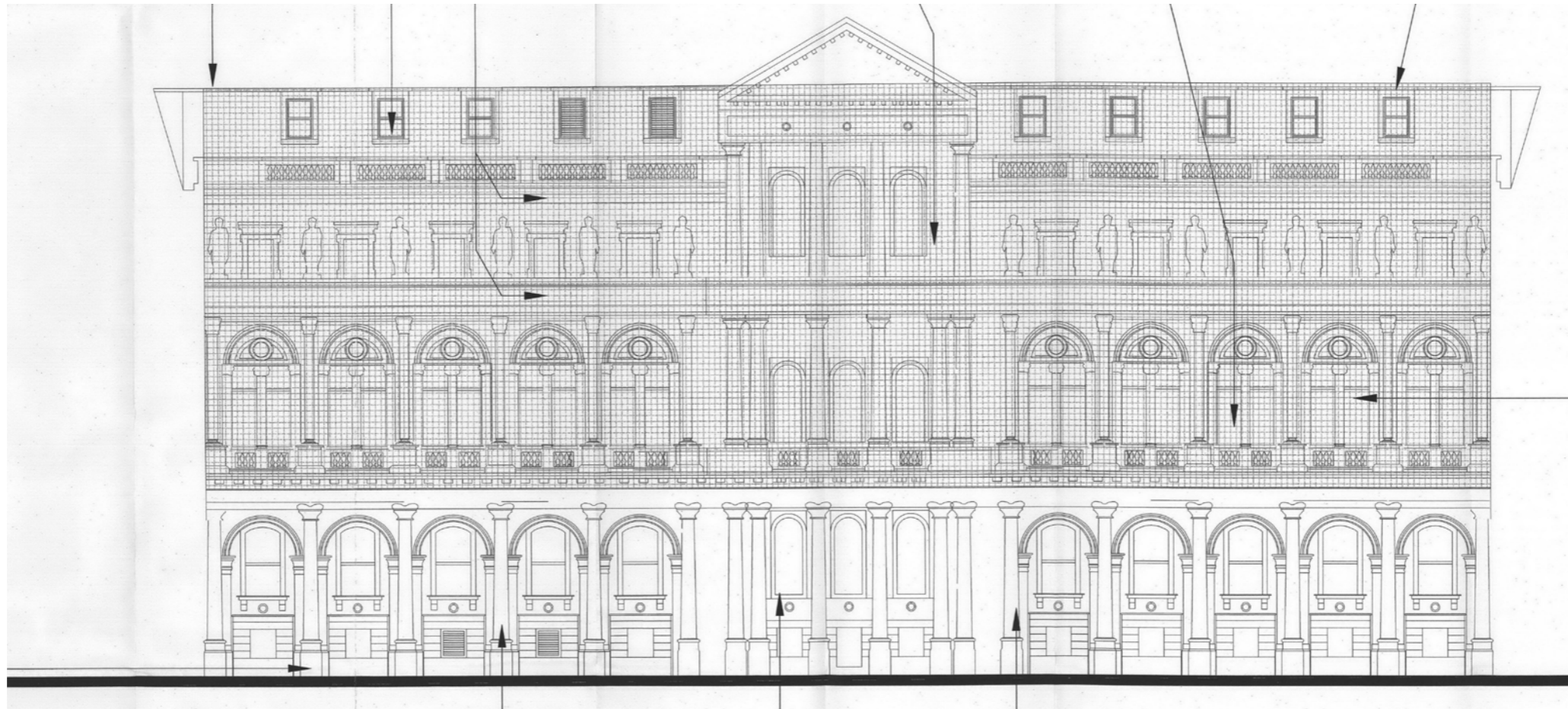
69

Foreign & Commonwealth Office Courtyard North Elevation 1:250

Watts (2006a)

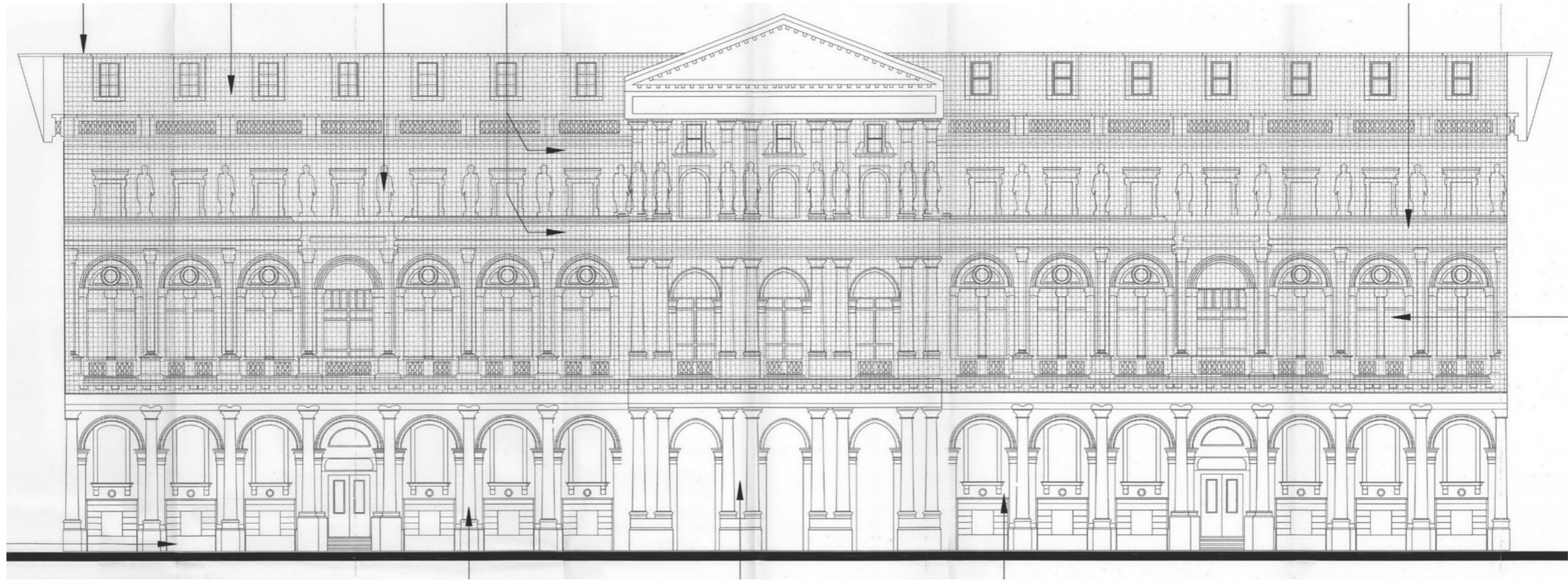


70 Foreign & Commonwealth Office Courtyard East Elevation 1:250



71

Foreign & Commonwealth Office Courtyard West Elevation 1:250



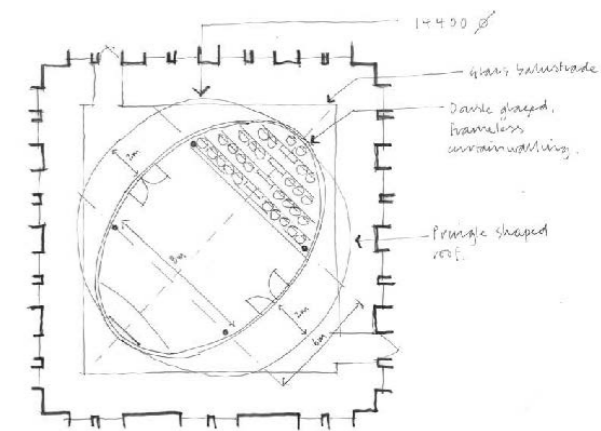
72

Foreign & Commonwealth Office Courtyard South Elevation 1:250

73 Diplomatic Academy Teaching Space

70-100 person teaching space in the Foreign & Commonwealth Office Courtyard

In 2015 planning permission was granted for the construction of a teaching pavilion in the smallest courtyard of the Foreign and Commonwealth Office.

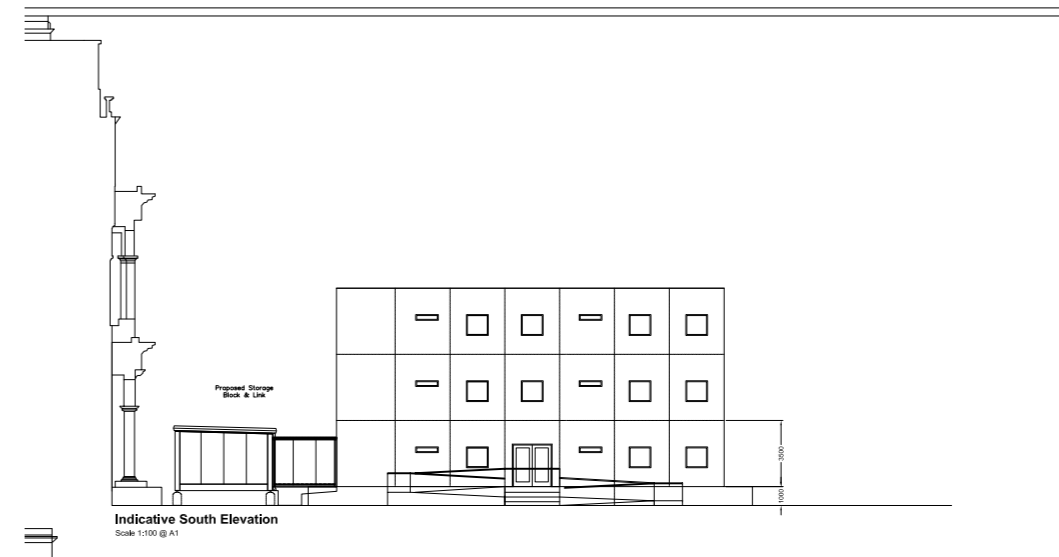
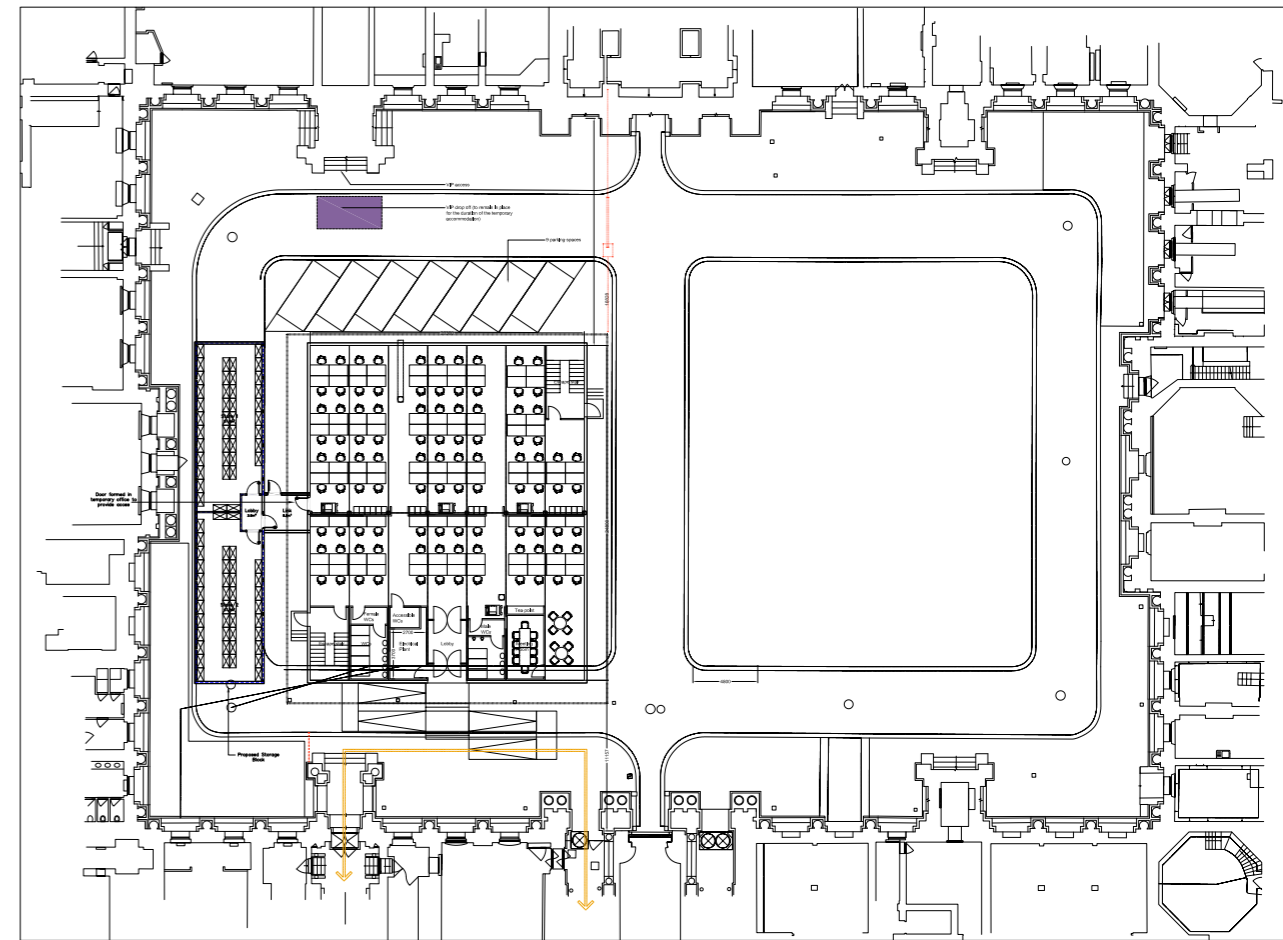


74 Temporary Office & Storage

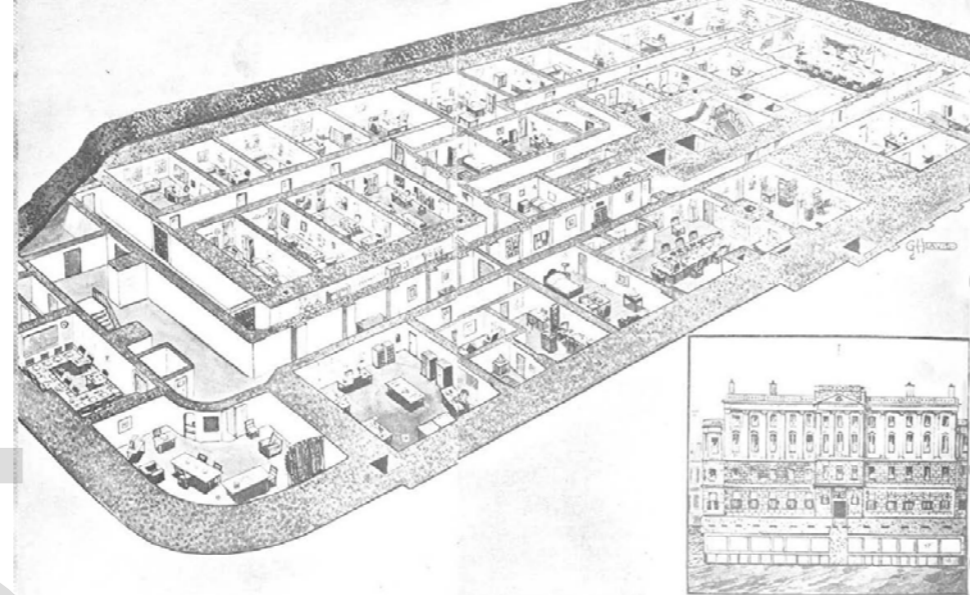
Temporary accommodation for 300 employees in the Foreign & Commonwealth Office Courtyard

In 2013 a planning application was granted for the construction of temporary pre-fabricated office accommodation in the main courtyard of the Foreign & Commonwealth Office to house staff during the refurbishment of Old Admiralty Building.

The success of these planning applications indicates that the space is considered to be appropriate for re-use.



75 The Cabinet War Rooms



Underground complex beneath the Treasury Building

“In the build-up to the Second World War, the government began looking for a strong basement in which a map room and a Cabinet Room could be constructed without major alterations.

The basement of GOGGS was chosen, not only because it was convenient for Downing Street, but because the concrete frame used in phase 2 would help prevent the collapse of the building should it receive a direct hit from a bomb. Initially, only a few rooms were commandeered but when Horse Guards was bombed on October 14, 1940, wrecking parts of 10 Downing Street, all Churchill’s staff moved into GOGGS.



Site

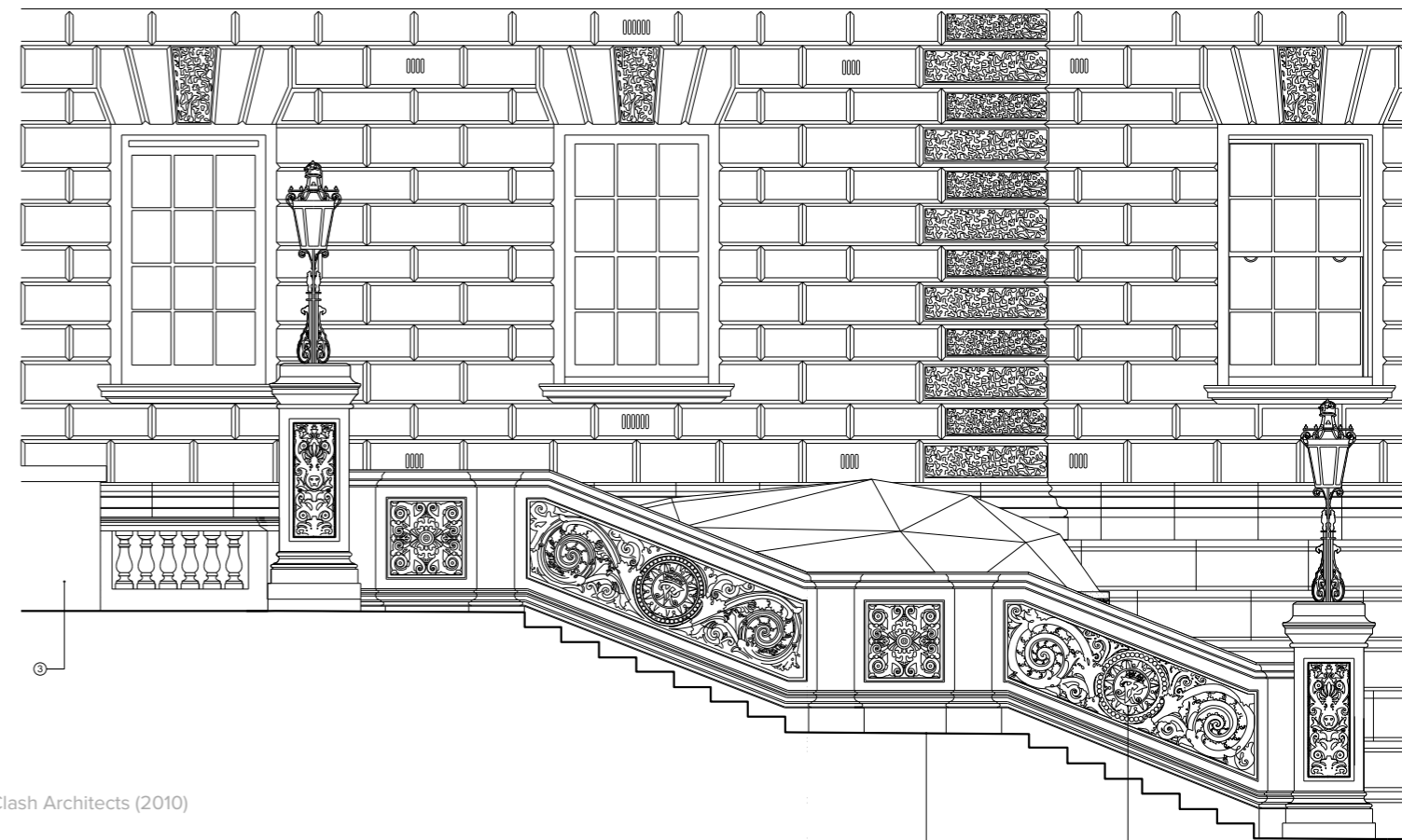
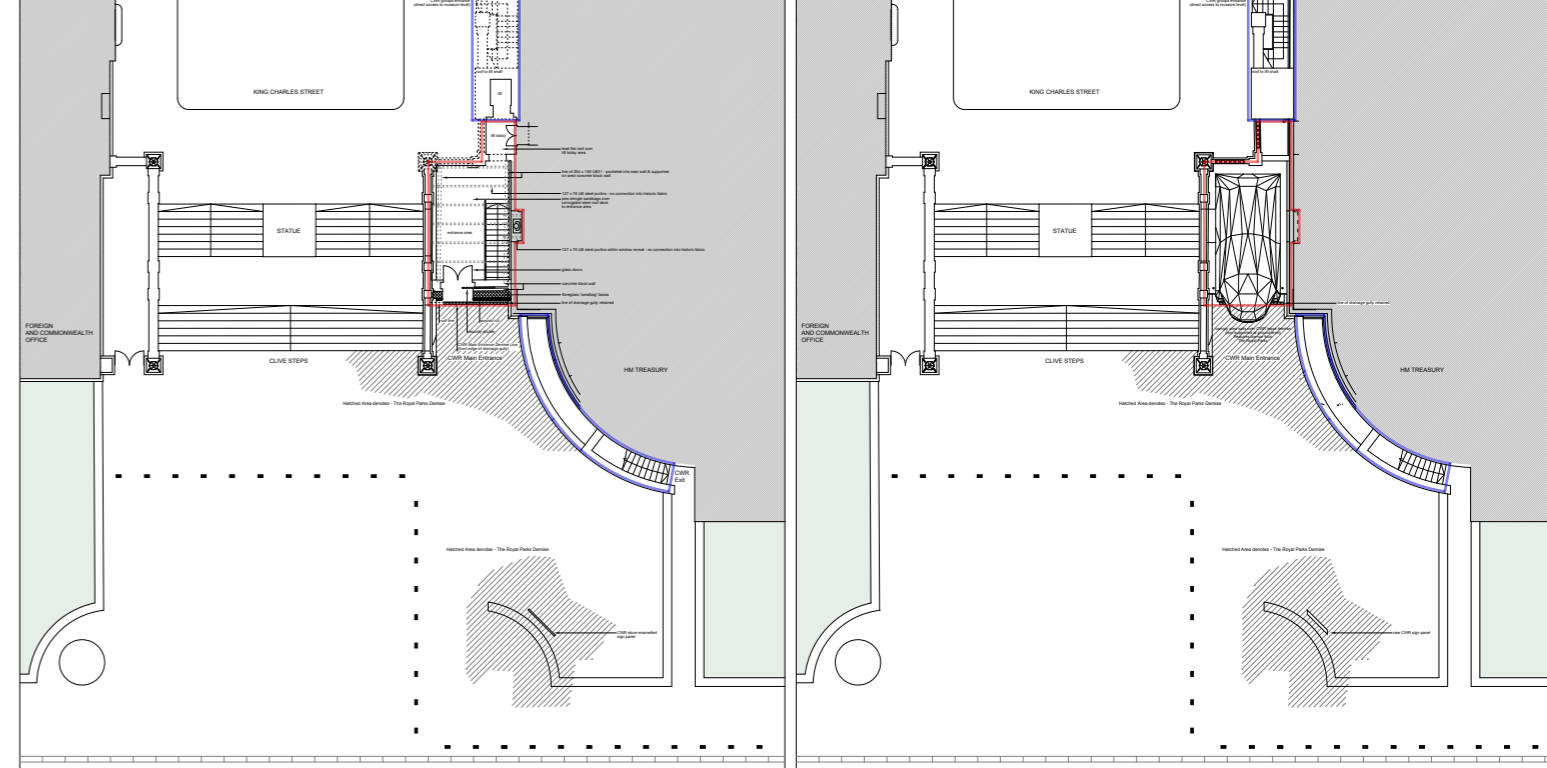
Within months, the departments moved to the basement included the Air Ministry and their main War Room. The Joint Intelligence Chiefs also occupied basement rooms, as did the people responsible for the D-Day Landings and associated deception plans and the Air Ministry Photographic Department.

To protect the basement, a thick bomb-proof concrete slab was constructed within the rooms at sub-ground floor level, and a large torpedo net was slung across the western courtyard to catch falling bombs. Air was filtered through a series of vents and ducts to guard against poisonous gases.”

GOV.UK (n.d.-a)

In 1984 the Cabinet War Rooms were opened to the public as a branch of the Imperial War Museum. In 2003 the War Rooms underwent a significant expansion to include a biographical museum of Winston Churchill and the museum was later renamed the Churchill War Rooms. Finally, in 2012 Clash Architects redesigned the entrance to the museum.

“The new external design included a faceted bronze entranceway, while the interior showed the cleaned and restored Portland stone walls of the Treasury building and Clive Steps. The design was described as appropriately martial and bulldog-like and as a fusion of architecture and sculpture.” Architects’ Journal (2012)



Clash Architects (2010)

PROPOSAL
**PROPOSAL
AND DESIGN
COMMUNICATION**

78

The Solution

The permanent relocation of Parliament to a bespoke building

A 2012 YouGov poll identified the Houses of Parliament as the joint second best landmark in Britain. (Gardiner & Pring, 2012). Despite this another poll (Chorley, 2017) has revealed a significant lack of public support with only 57% of the public supporting the proposed £3.9 billion works for the Palace of Westminster. With 26% of people going so far as to say the Palace of Westminster should be sold off or demolished.

With an annual repair bill of £49 million (Bryant, 2017). and the potential negative impact the grandeur of the monumental building (BBC, 2014) may have on the issues debated within the chambers, and the way they are debated in the confrontational opposing bench layout calls into question

the appropriateness of using such a historic building for today's democracy.

In 1844, on the topic of the rebuilding the Palace of Westminster the Earl of Lincoln, told MPs "if I had been employing an architect in the construction of my private residence, I should have a right to fool away as much of my money as I thought fit; but in the case of a public building, I consider myself acting, to a certain degree, as guardian of the public purse, and to have no right to sanction any expenditure, either for the gratification of any pride, or the indulgence of any fancy I might entertain, as to the proper and efficient construction of the building."

The conclusion of this analysis is that the most economic and culturally beneficial solution for the public, parliament and visitors would be the development of a permanent, bespoke parliament building which reflects the democratic values of transparency and accountability. Leaving the

Palace of Westminster to be restored at a measured pace, to be opened as a cultural destination and funded by its legacy function.

The monumentality and security of the classical stone façades of The Treasury and the Foreign & Commonwealth Office already emphasise the power, influence and tradition of the nation thus providing the ideal location for a parliament building. An entrance through the King Charles Street Arch would also embody the iconography of national identity.

It has already been indicated that the House of Lords could establish a chamber and offices in the QEII Conference Centre (Joint Committee on the Palace of Westminster, 2016) located just to the South of the Treasury. as such the burden of accommodation for the new Parliament can be restricted to just the offices, library, chamber, and committee rooms of the House of Commons, office space for Parliamentary officials and press, and public cafe and retail facilities.

79 Legacy

A Legacy for a vacant Palace of Westminster

With Parliament permanently occupying a new site the Palace of Westminster can then be vacated to be restored with less urgency and funding can be sourced through its intended legacy purpose or by entrusting the project to a third party such as the National Trust or English Heritage

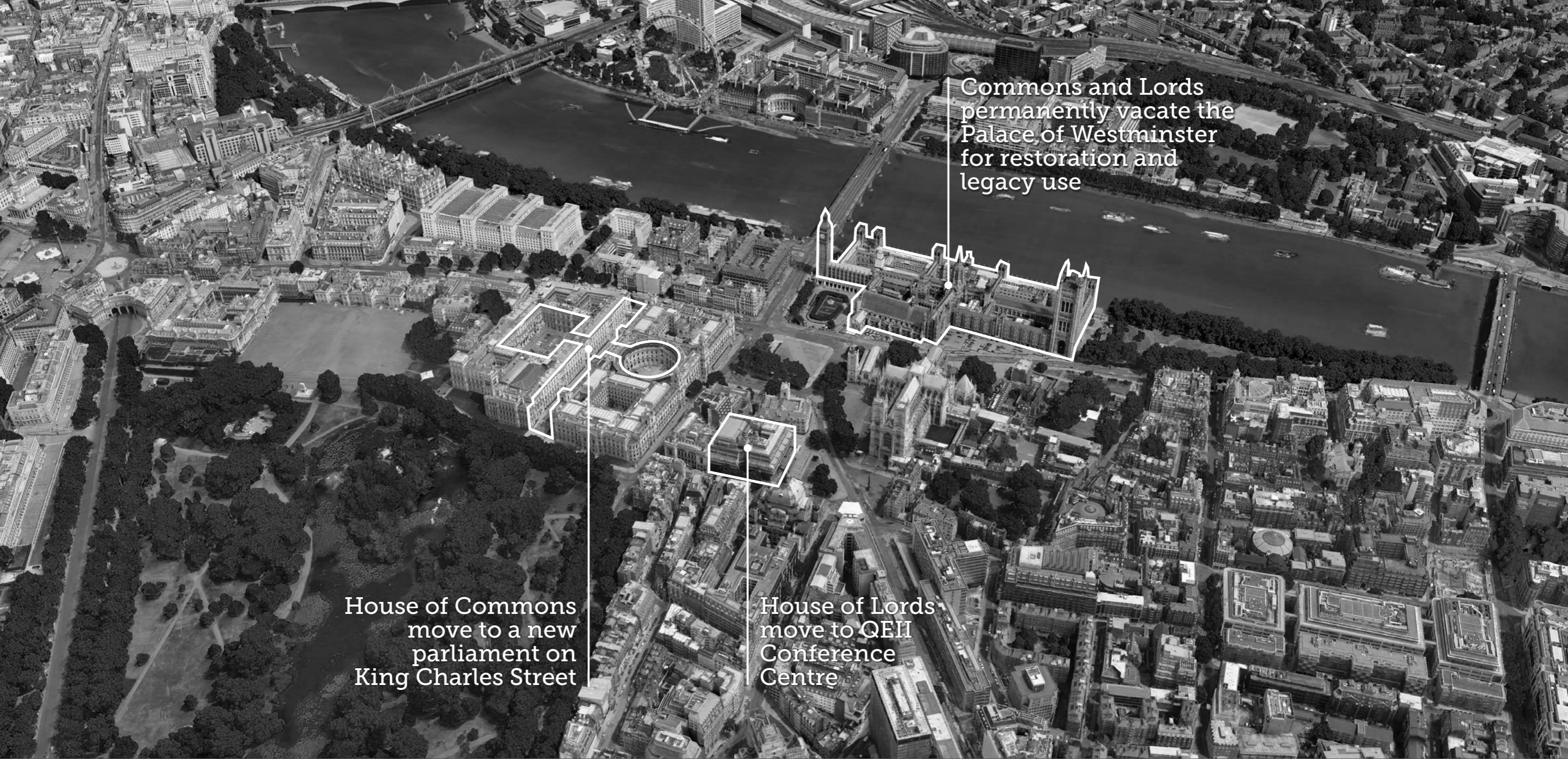
The legacy use of the Palace would likely be as a Parliamentary Museum with the building opened for public and commercial tours.

The existing Parliamentary Archive in the Victoria Tower can then expand into the abundant office spaces available in

the restored Palace with significantly improved access for the public and finally the temporary Parliamentary Education Centre can also be relocated within the restored Palace.

The large amount of office space within the Palace which are not of interest to tour groups could then be restored in a manner to which it could be commercially rented to companies and figures such as Queen's Counsel who seek a prestigious address for their enterprise. With larger spaces such as the libraries available as meeting and conference facilities.

This proposed solution intends to benefit all parties involved. The House of Commons and House of Lords will benefit from the construction of modern facilities designed specifically for the requirements of a modern parliament; the public will benefit from the legacy of the opening of the Palace of Westminster as a heritage museum without the long queues caused by security screening; and, the burden of the £3.9 billion restoration will no longer be on the tax payers for whom access to the Palace is currently so restricted.



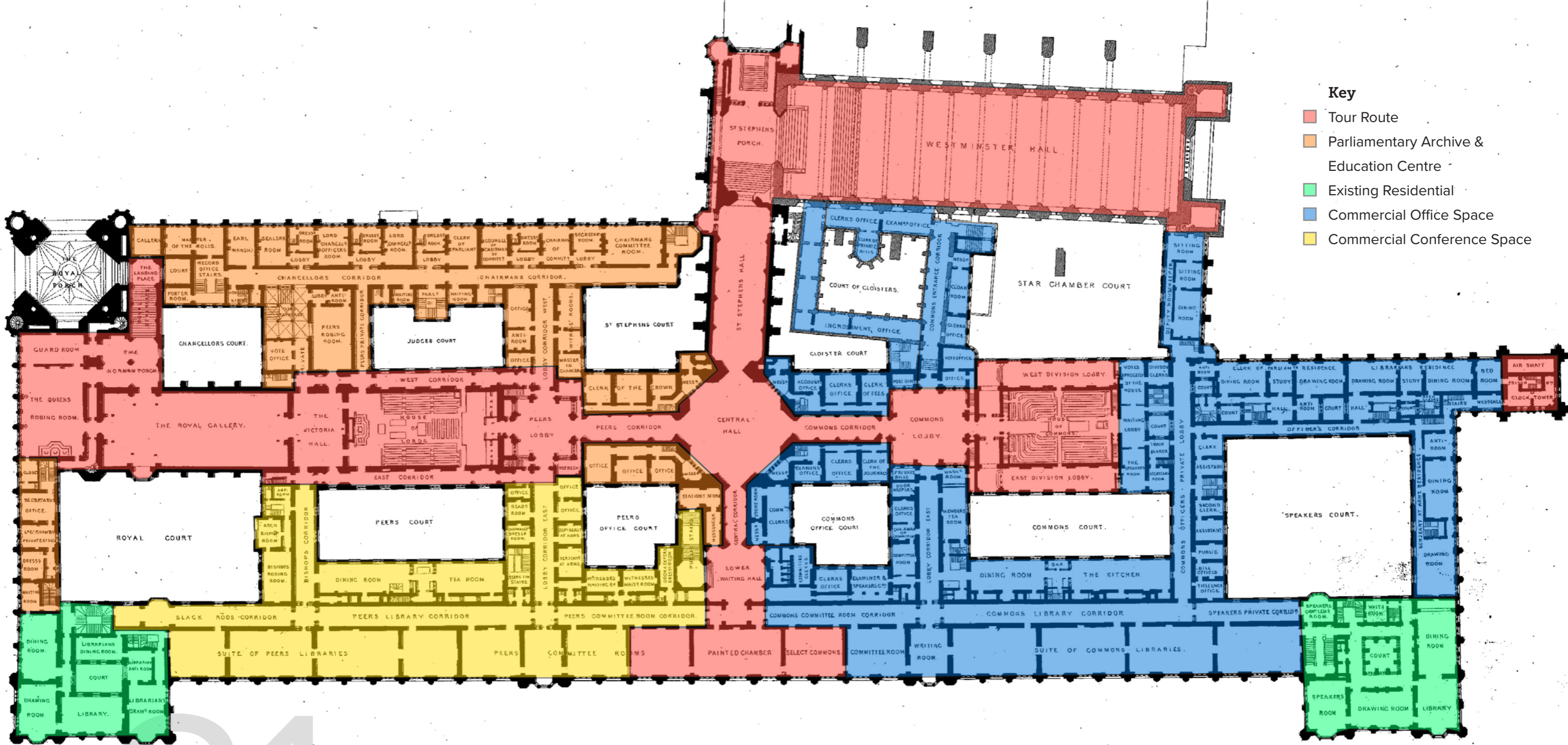
Commons and Lords permanently vacate the Palace of Westminster for restoration and legacy use

House of Commons move to a new parliament on King Charles Street

House of Lords move to QEII Conference Centre

Relocation

Whitehall, London



Legacy Use Palace of Westminster, Principal Floor Plan

82 Schedule of Accommodation

King Charles Street

Key

- House of Commons
- Joint

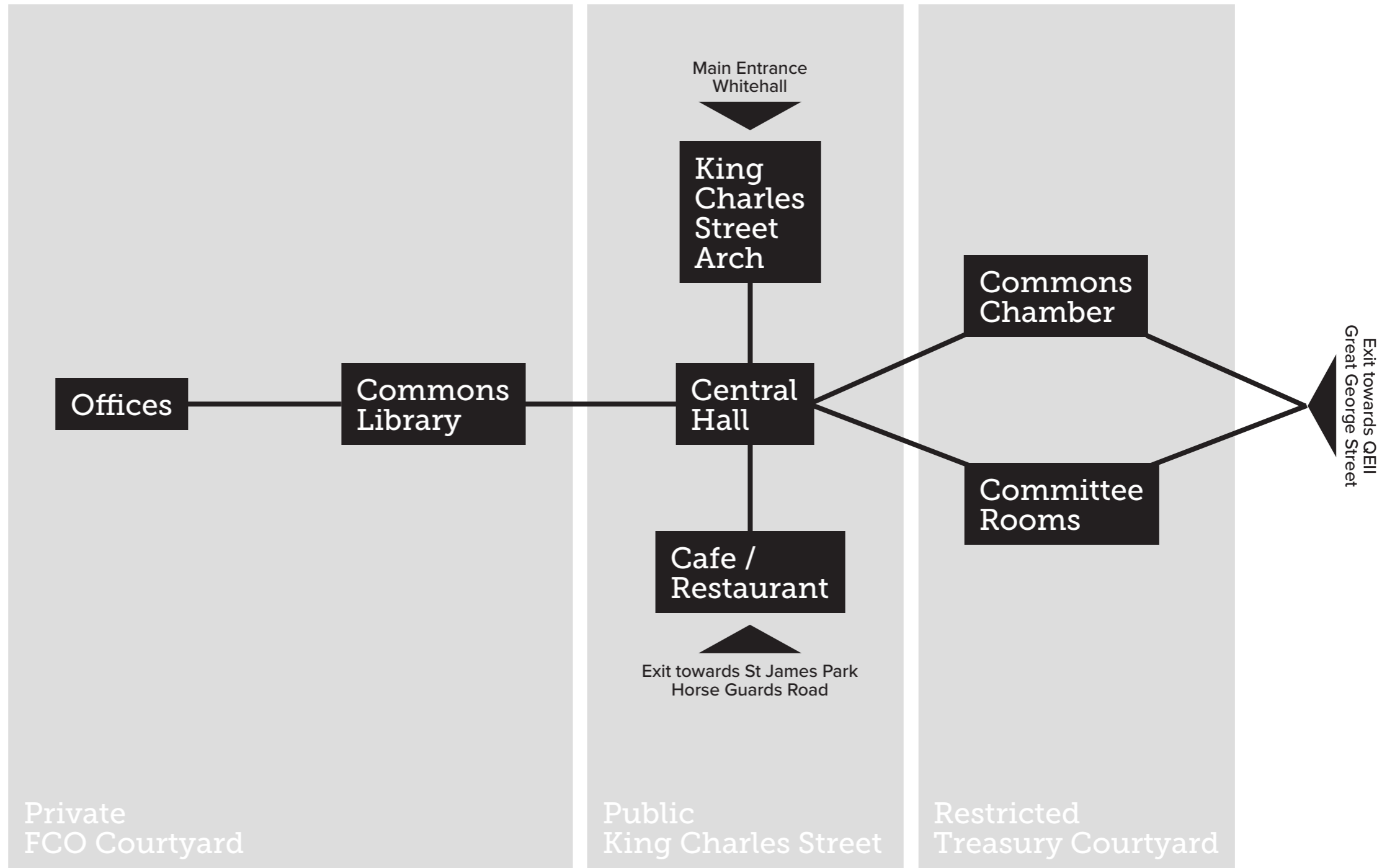
770 m²
Library

580 m²
Restaurant

430 m²
Chambers

5800 m²
Offices

710 m²
Committee
Rooms



83

Adjacency Diagram King Charles Street



CONCEPT
**MASSING ON KING
CHARLES STREET**



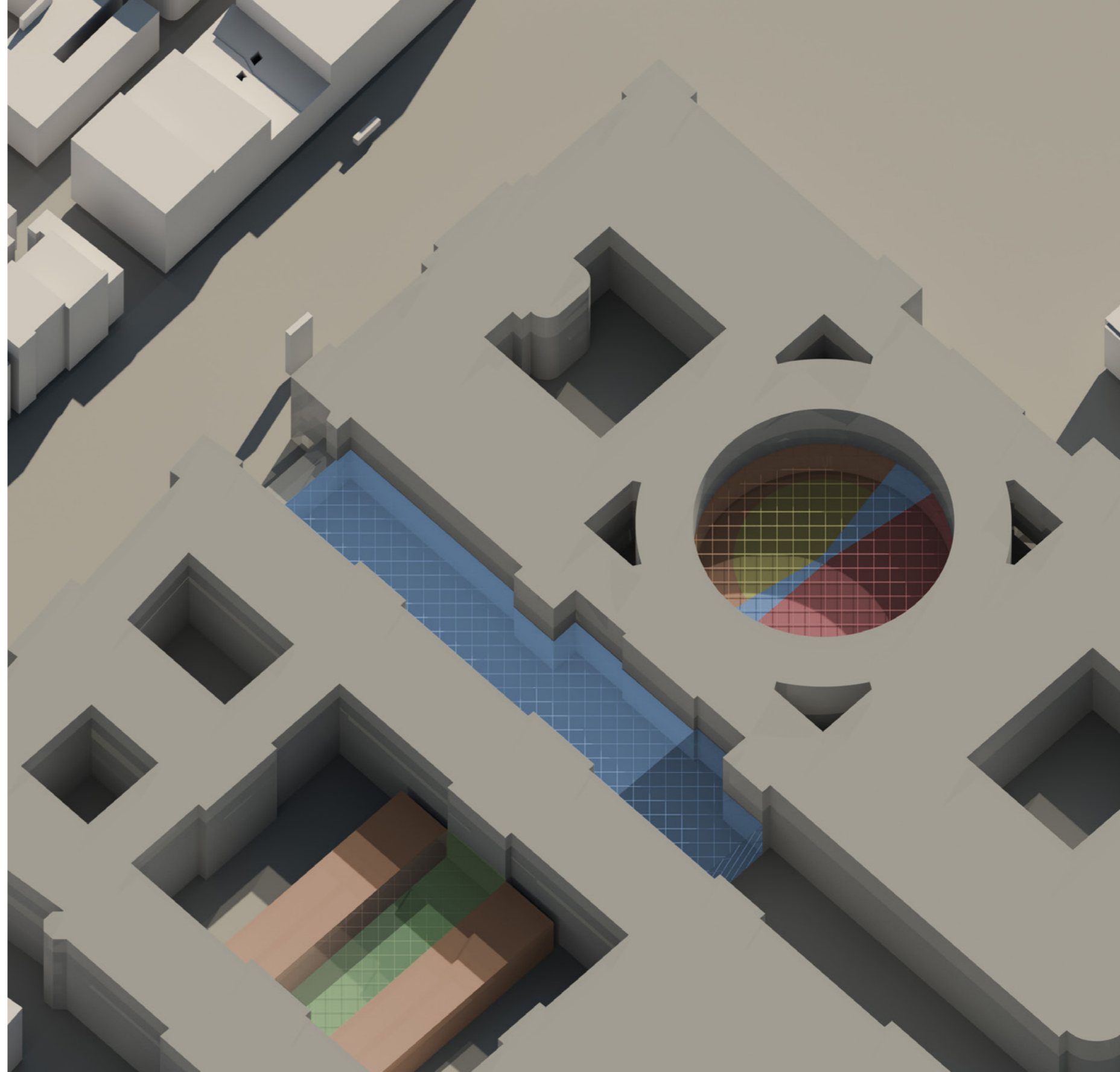
Site Plan 1:2500

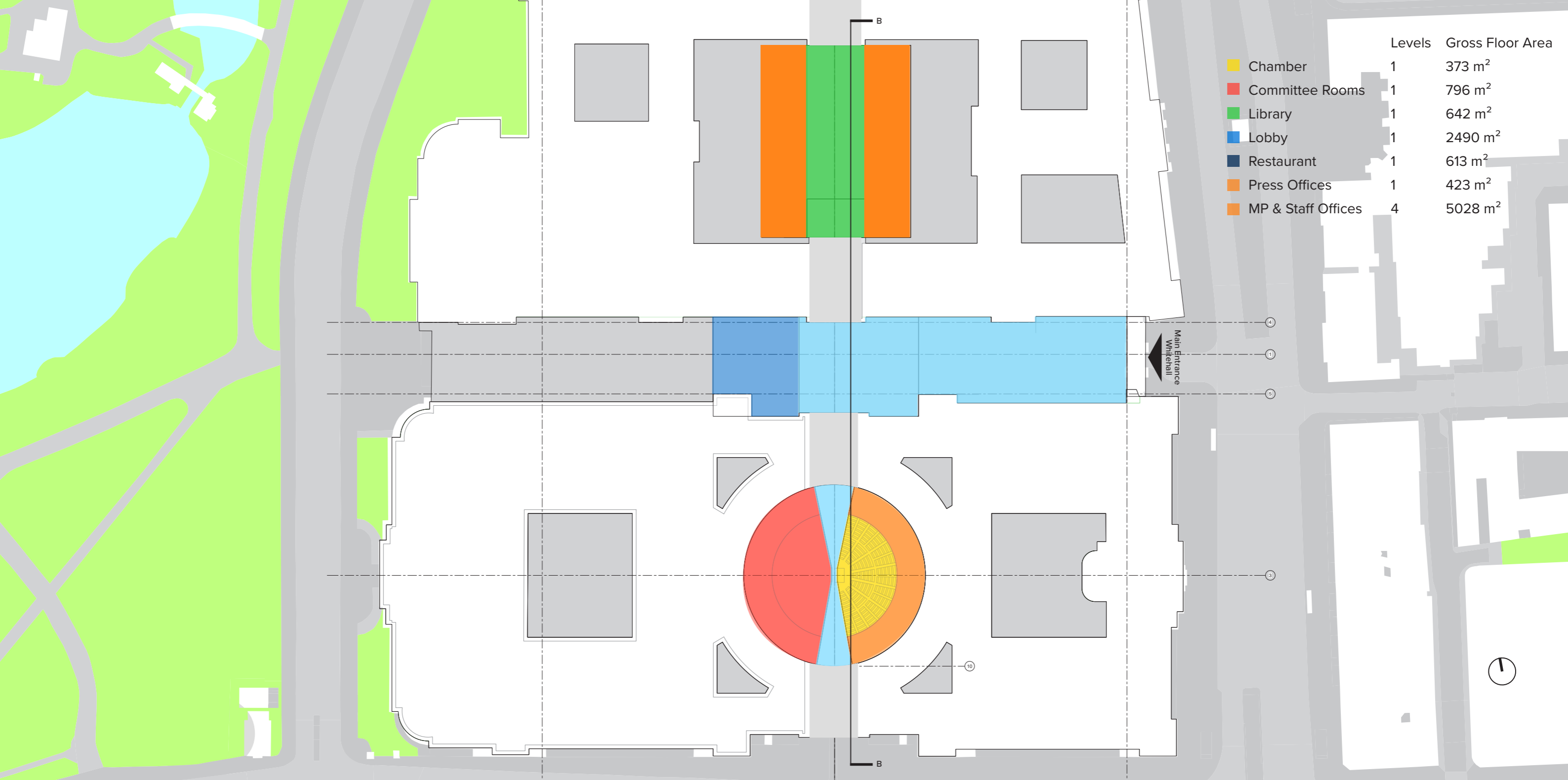
86 Conceptual Massing

A new Parliament on King Charles Street

External spaces are internalised with glazed roofs in order to maximise the use of space while minimising environmental impact on the surrounding buildings.

Environmental analysis will be carried out during the next stage of the project to ensure environmental targets for the buildings are met, as the glazed area of both the Foreign Office and Treasury are only 12% (significantly below the recommended 40%) it will be important to ensure the proposed building does not significantly reduce daylighting.





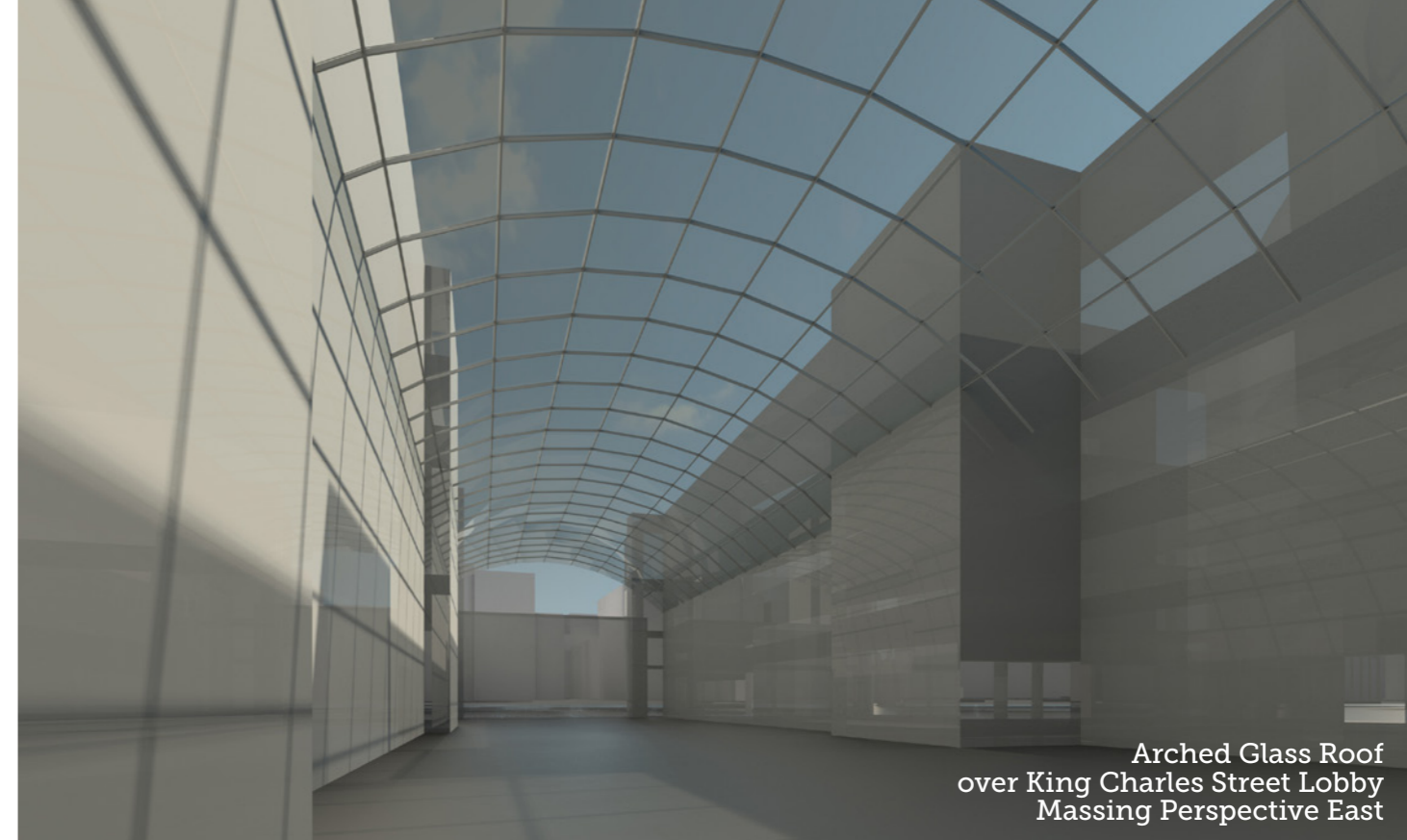
Ground Floor Plan 1:500

88 King Charles Street Lobby

Massing and experimental roof form

The main entrance through the Arch on King Charles Street leads into an expansive central arcade. The monumentality of the classical façades of the Treasury and the Foreign & Commonwealth Office serve to emphasise the power and influence of the nation that is a core value of parliamentary architecture and this is balanced by the abundant use of glass which is suggestive of the transparency and accountability of democratic government.

The interaction between the historic fabric of the arch and the intervention of the glass entrance will draw inspiration from the structural methodology of Ryder Architecture's Newcastle Central Station portico.



Arched Glass Roof
over King Charles Street Lobby
Massing Perspective East



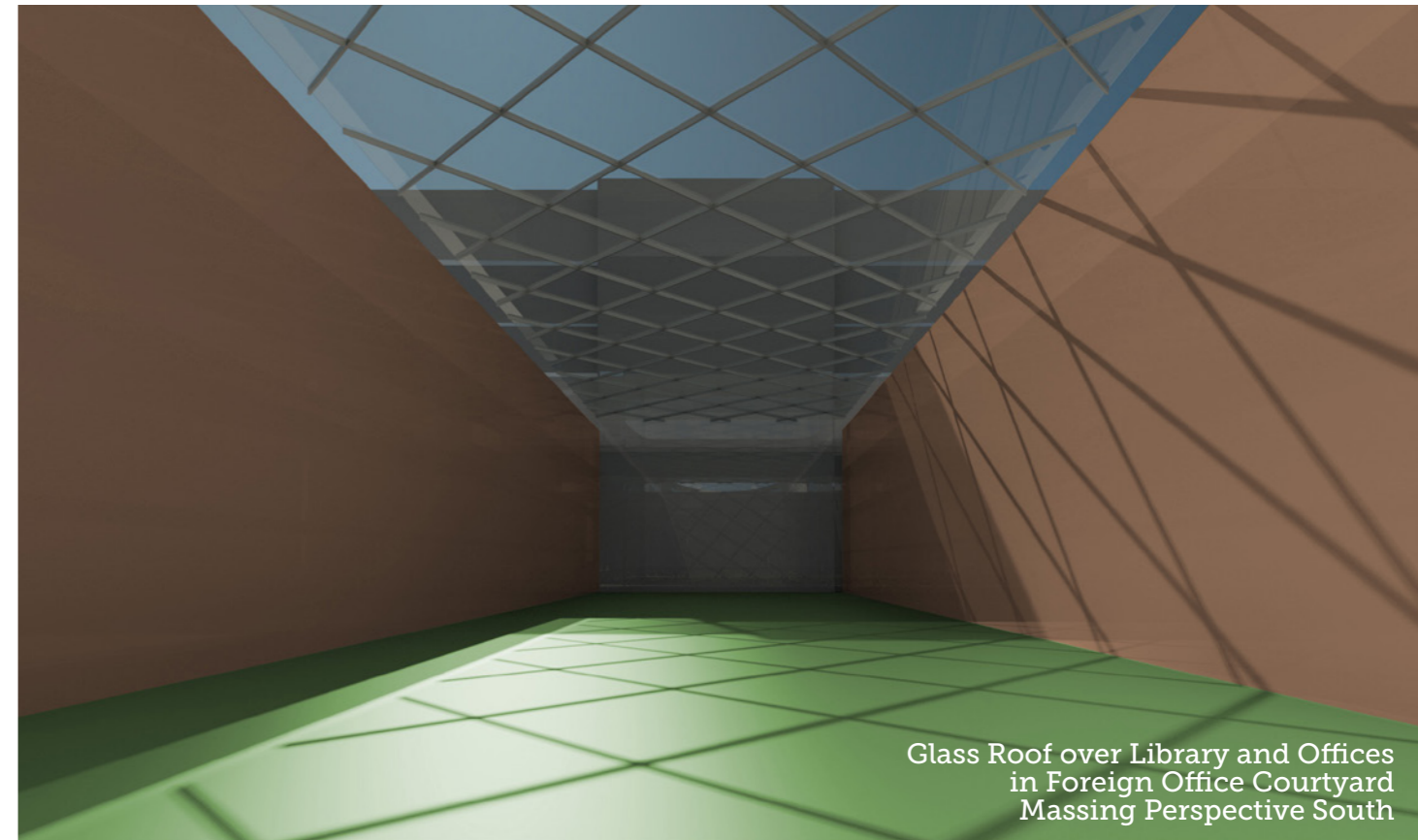
Existing Perspective West
King Charles Street
Kangarooie (2011)

89 Commons Library and Offices

Massing and experimental roof form

The House of Commons Library and Offices for MPs and their staff will be located within the courtyard of the Foreign & Commonwealth Office. An expansive glass roof maximises daylighting to both the proposed building and the Foreign & Commonwealth Office itself.

Four floors of MP Offices are located around the library which acts as a central atrium and meeting place. The façades of the Foreign Office provide a dramatic backdrop to the work and are suggestive of how politicians are answerable to the civil service and by extension the public.

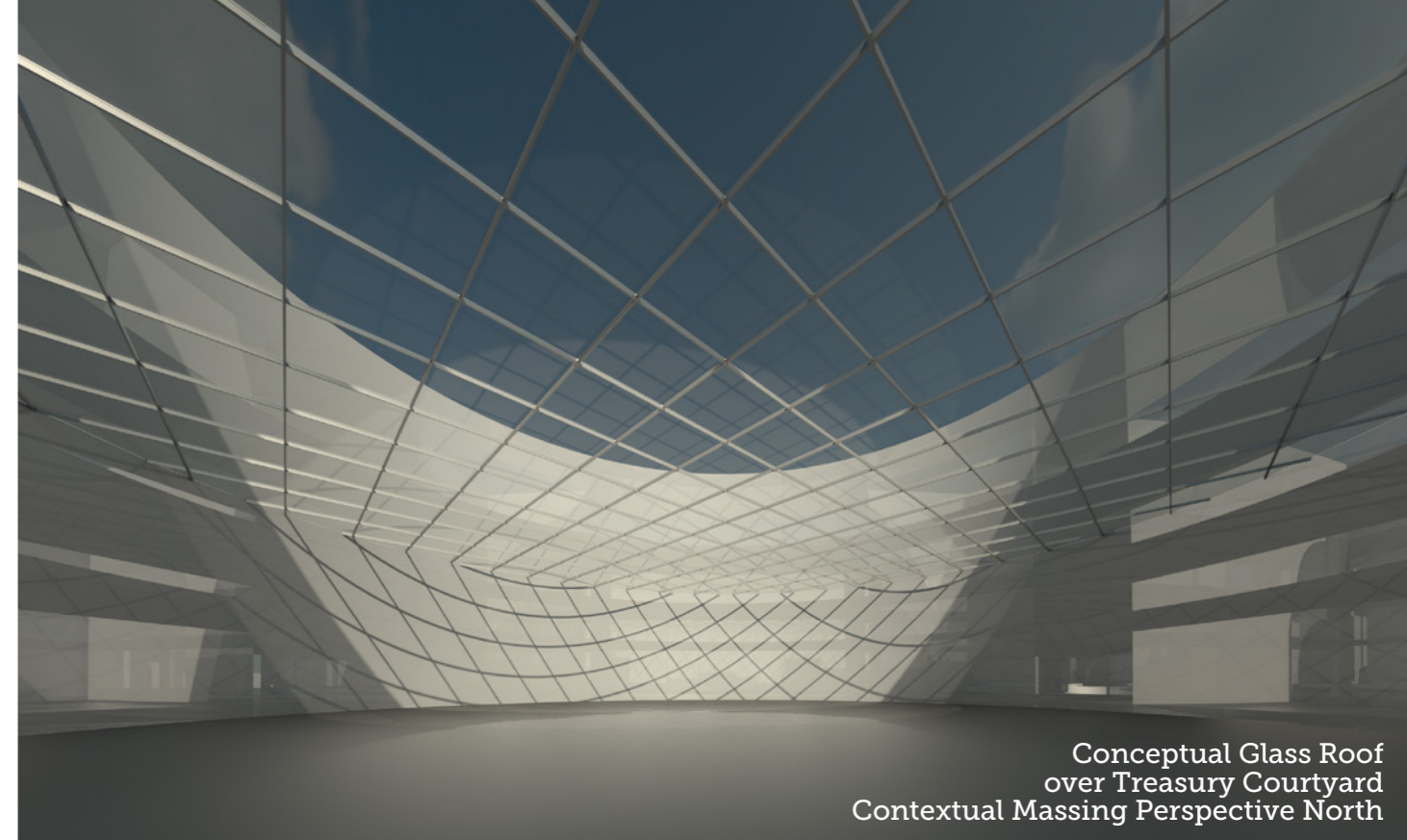


Glass Roof over Library and Offices
in Foreign Office Courtyard
Massing Perspective South

90 Chamber, Press and Committee Rooms

Contextual massing and experimental roof form

The chamber is the most important symbol of democracy and as such should embody the symbolic values of a nation. Much like the lobby arcade the glass roof of the chamber will show the transparency and accountability of parliament and the classical facade asserts the power and influence of the nation. The section overleaf highlights how a central semi-circular chamber layout - inspired by Foster's intervention to the Reichstag intervenes into the space with open plan press areas wrapping around and committee rooms located in the western portion.



Conceptual Glass Roof
over Treasury Courtyard
Contextual Massing Perspective North



Existing Perspective West
Treasury Courtyard
Esslinger (2014)



Section BB Existing Composite of Historical Drawings



Section BB Proposed

Composite of Historical Drawings

93 Indicative Energy Analysis

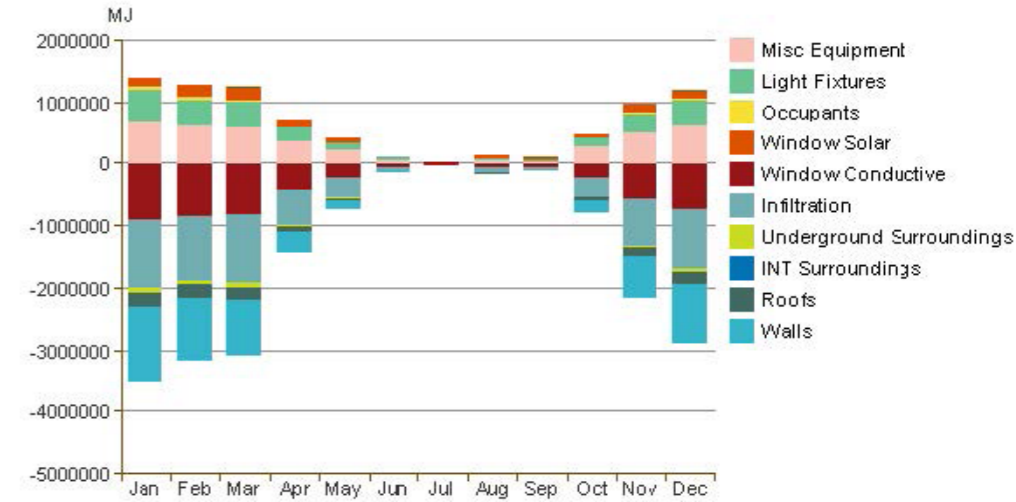
Conceptual energy analysis

Conceptual energy analysis has been performed on the massing of both the Treasury and Foreign & Commonwealth Office using theoretical tools - within Autodesk Revit using a figure of 12% glazing area based on analysis of the historical elevations - in order to better understand the environmental conditions within these historic buildings.

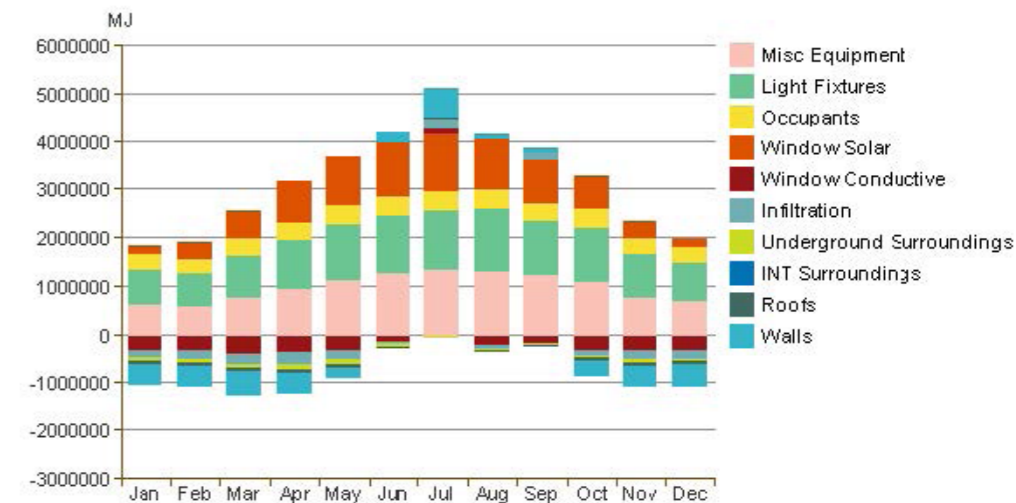
The results of which indicate that although there are significant heating demands in the winter, due to the depth of the building there is also a need for comfort cooling during some winter periods, and through spring, summer and autumn the deep building plan is poorly configured for natural ventilation.

One of the most complex tasks of the next phase of the design project will be ensuring the intervention ensures an appropriate environment within the surrounding buildings. However, through the use of such analysis tools it will be possible to objectively demonstrate the sustainability and environmental impact of the project through data-driven design.

An iterative design process will also be adopted to ensure that any impact of the structural design on the historic fabric of the surroundings is minimal and ideally deconstructable.



Monthly Heating Load



Monthly Cooling Load



APPENDIX

95 Bibliography

- Adrian Pingstone (2005) Available at: https://en.wikipedia.org/wiki/Foreign_and_Commonwealth_Office#/media/File:Foreign_office.london.arp.jpg
- Adam Elder (2004) Photographs of the Scottish Parliament Complex. Available at: <http://www.parliament.scot/newsandmediacentre/21673.aspx>
- AJBL (1999) Reichstag, New German Parliament. Available at: <http://www.ajbuildingslibrary.co.uk/projects/display/id/3124>
- AJBL (n.d.) Scottish Parliament by EMBT, RMJM. Available at: <http://www.ajbuildingslibrary.co.uk/projects/display/id/1090>
- Architects' Journal (2012) Clash opens new Churchill War Rooms entrance. Available at: <https://www.architectsjournal.co.uk/news/daily-news/clash-opens-new-churchill-war-rooms-entrance/8631414.article>
- Architects' Journal (2015). Feilden + Mawson completes Parliament education centre. Available at: <https://www.architectsjournal.co.uk/news/feilden-mawson-completes-parliament-education-centre/8686242.article>
- ASH.uk (2010) Available at: <https://www.flickr.com/photos/ashuk/4770385101>
- ASH.uk (2013) Available at: <https://www.flickr.com/photos/ashuk/8683196210/>
- BBC (2008) Black Rod. Available at: http://news.bbc.co.uk/democracylive/hi/guides/newsid_81000/81909.stm
- BBC (2014) The Crumbling Palace. Available at: <http://www.bbc.co.uk/iplayer/episode/b04yc1bw/the-crumbling-palace>
- Buchanan, P (2000) 'When Democracy Builds'. In On Foster...Foster on. Prestel Publishing.
- Buchanan, P (2000) 'When Democracy Builds'. In On Foster...Foster on. Prestel Publishing.
- Capita Symonds (2015) Planning Application: 15/02078/FULL. Available at: <http://idoxpa.westminster.gov.uk/online-applications/applicationDetails.do?activeTab=documents&keyVal=NKY1DYRPL7K00>
- Capita Symonds (2016) Planning Application: 16/04825/LBC. Available at: <http://idoxpa.westminster.gov.uk/online-applications/applicationDetails.do?activeTab=documents&keyVal=O7N0ORRPGQH00>
- Car Los (2008) Berlin - Free University - Philological Library - "The Brain". Available at: <https://www.flickr.com/photos/15434282@N00/2881224500/>
- Carlos Delgado (2011) Available at: https://en.wikipedia.org/wiki/Government_Offices_Great_George_Street#/media/File:Government_Offices_Great_George_Street.jpg
- Catherine Bebbington (2010) Available at: https://www.flickr.com/photos/uk_parliament/4642915654
- Chris Bryant (2017) Palace of Westminster: Restoration and Renewal. Hansard. Available at: <https://hansard.parliament.uk/Commons/2017-01-25/debates/B64F5EEB-5D57-42D5-B09D-85354A6E6916/PalaceOfWestminsterRestorationAndRenewal>
- Churchill (1943) Churchill and the Commons Chamber. Available at: <http://www.parliament.uk/about/living-heritage/building/palace/architecture/palacestructure/churchill/>
- Clash Architects (2010) Planning Application: 10/11003/FULL. Available at: <http://idoxpa.westminster.gov.uk/online-applications/applicationDetails.do?activeTab=documents&keyVal=LDSGM0RPZ5000>
- cmglee (2013) Available at: https://en.wikipedia.org/wiki/Foreign_and_Commonwealth_Office#/media/File:Cmglee_London_FCO_Grand_Staircase.jpg
- Datmater
- Davoud D. (2014) Available at: https://www.flickr.com/photos/sony_boy/14376889074/
- Deloitte (2014) Palace of Westminster Restoration and Renewal Programme Independent Options Appraisal. Final Report. Volume 1. Available at: <http://www.restorationandrenewal.parliament.uk/IOA-report.html>
- Deyan Sudjic (2001) Architecture and Democracy. Laurence King Publishing.
- Duncan Campbell (1983) War Plan UK
- Duncan Campbell (n.d.) Tunnels. Available at: <http://www.duncancampbell.org/content/tunnels>
- EDI Surveys (2009) Planning Application: 09/08120/LBC. Available at: <http://idoxpa.westminster.gov.uk/online-applications/applicationDetails.do?activeTab=documents&keyVal=KR8TODRP06A00>

Feilden + Mawson (2016) Planning Application: 16/10353/LBC. Available at: <http://idoxpa.westminster.gov.uk/online-applications/applicationDetails.do?activeTab=documents&keyVal=OFRIM7RPKDO00>

frisch-luft.ch (2013) Available at: <https://www.flickr.com/photos/jotpe/10506758625/>

Future Learn (2016a) How Parliament works in nearly 60 seconds. Available at: <https://www.futurelearn.com/courses/introduction-uk-parliament/1/steps/115887>

Gardiner, B. & Pring, C. (2012) Top ten British landmarks. YouGov. Available at: <https://yougov.co.uk/news/2012/03/23/top-ten-british-landmarks/>

Geoffrey Clifton-Brown (2017) Palace of Westminster: Restoration and Renewal. Hansard. Available at: <https://hansard.parliament.uk/Commons/2017-01-25/debates/B64F5EEB-5D57-42D5-B09D-85354A6E6916/>

PalaceOfWestminsterRestorationAndRenewal

George Oates (2014) Available at: <https://www.flickr.com/photos/george/15678554871>

George P. Landow (n.d.) Arch over King Charles Street. Available at: <http://www.victorianweb.org/sculpture/frith/10.html>

GOV.UK (n.d.-a) 1 Horse Guards Road. Available at: <https://www.gov.uk/government/history/1-horse-guards-road>

GOV.UK (n.d.-b) King Charles Street. Available at: <https://www.gov.uk/government/history/king-charles-street>

Gregg M. Erickson (2009) Available at: https://en.wikipedia.org/wiki/Horse_Guards_Parade#/media/File:Horse_Guards_Parade,_London_-_360%C2%B0_Panorama.jpg

HOK (2002) House of Commons Accommodation Review, Phase 2 Report

HOK (2013) Available at: <http://www.archdaily.com/391150/bbc-new-broadcasting-house>

Hopkins (2000) Available at: <http://www.hopkins.co.uk/projects/5/100/>

House of Commons Administration Committee (2005) House of Commons Accommodation. Third Report of Session 2005–06.

House of Commons Library (2016) Commons Briefing papers SN03367. Ministerial Residences.

Houses of Parliament Parliamentary Archives (n.d.) Archives Accommodation Programme. Available at: <http://www.parliament.uk/about/living-heritage/building/archives-accommodation-programme/>

Houses of Parliament Restoration and Renewal (n.d.) Images. Available at: <http://www.restorationandrenewal.parliament.uk/images.html>

https://www.flickr.com/photos/uk_parliament/2757120654/

Humboldt University (n.d.) The library of Humboldt University, Berlin

Ian Visits (2009) More on the “secret” tunnel under Whitehall. Available at: <https://www.ianvisits.co.uk/blog/2009/11/20/more-on-the-secret-tunnel-under-whitehall/>

Jodidio, P (2000) Sir Norman Foster. Taschen.

John Esslinger (2014) Available at: <https://www.flickr.com/photos/johnessl/1516258532>

Joint Committee on the Palace of Westminster (2016) Restoration and Renewal of the Palace of Westminster Contents. First Report of Session 2016–17. Available at: <http://www.restorationandrenewal.parliament.uk/joint-committee-report.html>

Kangarooobie (2011) Available at: <https://www.flickr.com/photos/kangarooobie/5550242107>

Kurt Bauschardt (2012) Available at: <https://www.flickr.com/photos/kurt-b/8037548736>

Matt Chorley (2017) Quarter of voters want parliament sold or knocked down. The Times. Available at: <http://www.thetimes.co.uk/edition/news/quarter-of-voters-want-parliament-sold-or-knocked-down-t55z80fq8>

Michael Ellis (2017) Palace of Westminster: Restoration and Renewal. Hansard. Available at: <https://hansard.parliament.uk/Commons/2017-01-25/debates/B64F5EEB-5D57-42D5-B09D-85354A6E6916/PalaceOfWestminsterRestorationAndRenewal>

Mirrorpix (1972) Available at: <http://www.alamy.com/stock-photo-an-emergency-car-park-set-up-in-horse-guards-parade-central-london-81613200.html>

Never House (2012) Available at: https://www.flickr.com/photos/never_house/7844876602

Parliamentary Education Office (n.d.-a) The design. Available at: <http://www.peo.gov.au/learning/closer-look/australias-parliament-house/the-design.html>

Parliamentary Education Office (n.d.-b) Parliament House. Available at: <http://www.peo.gov.au/learning/fact-sheets/parliament-house.html>

Parliamentary Education Office (n.d.-c) The need for a new Parliament House. Available at: <http://www.peo.gov.au/learning/closer-look/australias-parliament-house/the-need-for-a-new-parliament-house.html>

Paul Shaw (2014) Available at: <https://www.flickr.com/photos/number10gov/14248197269/>

Peter Day (2015) What should we do with the Palace of Westminster? BBC. Available at: <http://www.bbc.co.uk/news/business-32016540>

Populous (2010) populous and atkins: beach volleyball stadium london 2012. Available at: <http://www.designboom.com/architecture/populous-and-atkins-beach-volleyball-stadium-london-2012/>

Public Records Office (1898) Elevations to Parliament Street and St James's Park, Dec 1898, signed by Brydon. Public Records Office, WORK 30/1007

Public Records Office (1902a) Elevation to Charles Street, 1902, initialled by Tanner. Public Records Office, WORK 30/1042

Public Records Office (1902b) Section through Circular Court, 1902, initialled by Tanner. Public Records Office, WORK 30/1047

RIBA (n.d.) 5 of the Best Parliament Buildings. Available at: <https://www.architecture.com/>

Explore/5ofthebest/5ofthebestparliamentbuildings.aspx

Robert Freidus (n.d.) Arch over King Charles Street Photographs. Available at: <http://www.victorianweb.org/sculpture/frith/10.html>

Roger Harris (2012) Available at: https://www.flickr.com/photos/uk_parliament/7165865936/in/album-72157629647476536/

Ryder (n.d.) Newcastle Central Station. Available at: <https://www.ryderarchitecture.com/projects/newcastle-central-station.htm>

Sherif Wagih (2013) Available at: https://www.flickr.com/photos/s_wagih/9152235410

The Post Office Electrical Engineers Journal (1946) January 1946. p. 129-131.

The Scottish Parliament (n.d.) Photographs of the Scottish Parliament Complex. Available at: <http://www.scottish.parliament.uk/newsandmediacentre/21673.aspx>

Thomas Richter (2012) Available at: https://www.flickr.com/photos/cliff_r/15203348391/

UK Parliament (1999) Available at: https://www.flickr.com/photos/uk_parliament/2713947212

UK Parliament (2008a) Available at: https://www.flickr.com/photos/uk_parliament/2701222068

UK Parliament (2008b) Available at: https://www.flickr.com/photos/uk_parliament/2701203046

UK Parliament (2008c) Available at: https://www.flickr.com/photos/uk_parliament/2757120644

UK Parliament (2008d) Available at: https://www.flickr.com/photos/uk_parliament/2700327407

UK Parliament (2008d) Available at: https://www.flickr.com/photos/uk_parliament/2757120654

UK Parliament (2008e) Available at: https://www.flickr.com/photos/uk_parliament/2700327415

UK Parliament (2008f) Available at: https://www.flickr.com/photos/uk_parliament/2713947220

UK Parliament (2008g) Available at: https://www.flickr.com/photos/uk_parliament/2700311119

UK Parliament (2008i) Available at: https://www.flickr.com/photos/uk_parliament/2753260512

UK Parliament (n.d.-a) Committees. Available at: <http://www.parliament.uk/business/committees/>

UK Parliament (n.d.-b) Interactive map of Parliament. Available at: <http://www.parliament.uk/visiting/online-tours/virtualtours/>

UK Parliament (2008h) Available at: https://www.flickr.com/photos/uk_parliament/2700369675

Vale, L. J. (2008) Architecture, power and national identity. 2nd Edition. Routledge.

Watts (2006a) Planning Application: 06/07113/LBC. Available at: <http://idoxpa.westminster.gov.uk/online-applications/applicationDetails.do?activeTab=documents&keyVal=J56DIPRP40000>

Watts (2006b) Planning Application: 06/07938/LBC. Available at: <http://idoxpa.westminster.gov.uk/online-applications/applicationDetails.do?activeTab=documents&keyVal=J6PJPERP40000>

West One (2008) Planning Application: 07/08939/FULL. Available at: <http://idoxpa.westminster.gov.uk/online-applications/applicationDetails.do?activeTab=documents&keyVal=JQCYNVRP03500>

www.parliament.uk (n.d.-a) House of Commons Library. Available at: <http://www.parliament.uk/visiting/online-tours/virtualtours/commons-library-tour/>

www.parliament.uk (n.d.-b) Committee Rooms. Available at: <http://www.parliament.uk/visiting/online-tours/virtualtours/committee-rooms/>

www.parliament.uk (n.d.-c) Victoria Tower. Available at: <http://www.parliament.uk/visiting/online-tours/virtualtours/victoria-tower/>

XML (2016) Parliament.

Zefrographica (2014) Available at: <https://www.flickr.com/photos/zefrog/14073002961>