Summary of the construction history of the new St Paul's

1670: First model completed

1673: Royal Warrant issued based on the Great Model

1675: May- Warrant for the "Warrant" design

1675: July- first foundation contracts issued and the foundations
of Choir and east side of Crossing commence

1676: November transept foundations commence

1678: September Nave foundations commence

1685: Choir and transepts finished to top of lower order

1687-8: Foundations of west end dug and Inigo Jones portico dismantled

1697: First service in the Choir

1698: Dome reaches Whispering Gallery level

1699: Cibber's carved phoenix in pediment of south transept

1700-1705: Design evolution of the west front and towers by Wren and Hawksmoor

1706: West portico completed

1708: Outer dome leaded, western towers completed

1711: St Pauls declared finished

Wren and the new St Paul's

8.5 Following the destruction of the City in the Great Fire in 1666 Wren's first proposal for a new cathedral was indicatively shown on a drawing produced a few days later as part of a proposal for a new City plan. However, it would be a further two years before proponents for the repair and propping up of the existing, heavily damaged structure finally admitted defeat, following a fall of masonry in April 1668, and the need for a new building was accepted. Wren was formally instructed by Dean Sancroft to design that building later in 1668 and by autumn 1669 had reworked his initial, post-Fire proposal into a new design; illustrated by a wooden model completed in 1669/70, a fragment of which survives.

8.6 In 1670 Wren was appointed Surveyor of the Kings Works and also appointed Surveyor to the new Commission established to rebuild the city churches also destroyed in the Great Fire. He was not actually formally appointed architect to St Paul's until 1673, by which time he had produced his first model for the new cathedral. This was in the form of a Greek Cross, which aspired to the scale and formal architectural qualities of the great Renaissance and seventeenth century centralised churches of Catholic Europe but were, more importantly in light of the Protestant state religion in England, related to the plan form of earlier, ancient examples of monuments in "the Levant" (or Middle East) including early Christian churches. These designs received Royal approval in 1672.

8.7 In early 1673 amendments, in the form of a vestibule and portico at the west end, resulted in a design which formed the basis of the Great Model. Formal approval by Royal Warrant, the establishment of the Commission and appointment of Wren as architect based on the Great Model design were all completed in 1673.

8.8 Concerns that the plans were not stately enough and were also at odds with Anglican Church values in the 17th Century resulted in amendments to the design. A radical redesign to produce a building with a traditional Latin cross plan and Basilican silhouette, capable of construction in stages as was traditional for cathedrals, was confirmed by an informal warrant in November 1673 (The "Warrant Design"). However, with the private approval of the King, Wren set about reworking this compromised design and in broadly two phases he reached the basis of the current building. The key change from the Warrant plan was the reduction of the nave from five bays to three, thus balancing the three bays of the choir and reflecting the earlier, centrally planned model. The removal of the proposed spire shown rising from the dome was also abandoned in a "purification" of the form of the cathedral.

8.9 This redesign must have been substantially complete including the extent of the whole building, the transept porticos, the chapels and the diameter of the dome when first building contracts were issued in 1675. Work commenced on the western piers of the dome in 1676.

8.10 No "Approved Design" was exhibited by Wren following the rejection of the Great Model in 1673 and the final form of the cathedral was, to a certain extent fluid; although constrained by the structural decisions that had to be taken at an early stage. The final form of the western towers was not decided until the early years of the 18th Century when Wren was required to show his design for the completion of the Cathedral in February 1700. The date of the official completion of the Cathedral was 1711, some 38 years after the first Royal Warrant was issued for its construction. The "new" St Pauls was the first Post Reformation cathedral in England and the first in a classical style.

Summary of the significance of St Paul's

8.11 **St Paul's Cathedral is of special Historic Interest**:

- As the major building completed as part of the reconstruction of the City of London following the Great Fire. It was originally conceived as the centrepiece or node of a planned city and streets, a layout based on continental principals of urban design which was not implemented.
- As the pre-eminent example of a Baroque ecclesiastical building in England completed when the style was at its height in the late 17th and early 18th century.
- For its relationship with the Commission for the rebuilding of the City Churches for which Wren was the Surveyor.
- As a building funded by a dedicated Coal and Wine Tax originally introduced solely for its construction, but later used to fund the Queen Anne Churches and continuing as a tax until the 19th century.
- For the associations with the Post Fire rebuilding of the City of London in which Sir Christopher Wren and Robert Hooke had leading roles; reconstructing many city churches and The Monument.
- For its role in reflecting the contested ideas and liturgical practices of the 19th century.

- For its associations with the highly influential Deans including John Donne, John Hume, Richard William Church; William Inge; Walter Matthew; and Bishops including Howley, Jackson, Tate, Hope, and Chartres.
- For its role in contested ideas about conservation including the replication and interpretation of earlier failed interior paint schemes, including those by Thornhill undertaken in the early 20th century.
- For the number of urban planning schemes designed in succeeding centuries illustrating the desire to make St Paul's the focal point of views from the south bank and the river itself.
- For the survival of the Cathedral including bomb attacks by suffragettes in the early 20th century, Zeppelin attacks in the Great War and more famously during the London Blitz in WWII when it became a symbol of national resistance.
- For the role of the Cathedral as another national mausoleum in addition to Westminster Abbey and containing 33 state sponsored monuments including those to Florence Nightingale; John Howard (prison reformer); Samuel Johnson; Joshua Reynolds; JMW Turner; Sir Edwin Landseer; Viscount Melbourne; and Frederic Lord Leighton.
- For the role of the building as the venue for national events, both commemorative and celebratory including royal weddings, jubilees and memorial services.
- As the location of the burial site of Sir Christopher Wren, Admiral Lord Nelson and the Duke of Wellington all in the crypt, Wren's tomb being the first in this location. The crypt also includes the OBE Chapel, spiritual home of the order.
- For the social and spiritual values that have been attached to the Cathedral over centuries.

8.12 **St Paul's Cathedral is of special Architectural Interest:**

- As the work of Sir Christopher Wren one of Britain's greatest architects and a figure of international significance in terms of architecture and science. The building is regarded by many as his masterpiece.
- For containing the work of craftsmen including Nicholas Stone, William Kempster, Edward Pierce, Francis Bird, Caius Gabriel Cibber, Grinling Gibbons and Jean Tijou when first constructed.
- For containing the work of craftsmen including James Thornhill; Alfred Stevens; GF Watts; W.E Britten, C E. Kempe; W.B Richmond; in subsequent adaptations and alterations in the 19th and 20th centuries.

- For its relationship with other Wren classical designs including the City Churches and particularly their towers and spires which amplifies the experience of significance and landmarks.
- For its relationship with the monolithic freestanding classical column of The Monument.
- For the use of expertly selected materials and advancing technology in construction, including Portland stone, the favoured material for rebuilding important civic buildings and structures in London from the late17th century.
- For the scale of the design, designed to be visually dominant and located on the site of the previous cathedral on elevated ground.
- For the reconciliation of the traditional Latin cross plan favoured by the Anglican church with the centralised oriental and continental Baroque plan favoured by Wren, illustrated through documented drawings and the Great Model.
- For the south western tower spiral stairs which are an elegant and structurally daring design.
- For the external design of the drum and dome, the largest of its type in England at the time and regarded as one of the most perfect in the world (*Bannister Fletcher, Summerson and Pevsner)*, Wren drew on models from Rome and Paris and his exploration of ancient architecture.
- For the structural ingenuity of the dome with different internal and external profiles and the use of the concealed brick cone to support the lantern.
- For the internal relationship of the dome, drum and peristyle and in particular the volumes of the architecture below and within.
- For the elegant and dynamic Baroque west towers, and their vital contribution to the cathedral's external design.
- For the acoustics internally including the special acoustic of "The Whispering Gallery".
- For the examples of subsequent alteration and conservation practice and the association with Surveyors to the Fabric including John James (1723-46), Robert Mylne (1766-1811) S P Cockerell (1811-19), C R Cockerell (1819-1852) Francis Penrose (1852-1897) Mervyn Macartney (1906-1931), Godfrey Allen (1931-1956), Bernard Fielden 1969-1977, William Whitfield 1985-1990); and Martin Stancliffe (1990-2011) who oversaw the most recent major restoration of the Cathedral.

8.13 **St Paul's Cathedral is of Artistic Interest:**

- For the external sculptural decoration including in the pediments and crowning figural sculptures, including their iconography.
- For the examples of the craftsmanship of Grinling Gibbons, Francis Bird, Cauis Gabriel Cibber, Jean Tjou, Nicholas Stone, Edward Pierce, William Kempster, John Singer Sarjent, John Flaxman, Rossi, (William) Hamo Thorneycroft and John Bacon among many others.
- For the internal monuments and memorials including the earliest surviving one from before the Fire, that to John Donne by Nicholas Stone.
- For the internal decoration including mosaics in the roof vaults and Thornhill's *trompe l'oeil* architectural painting of the dome.
- For the long history of artists engaged in schemes of decoration, many unrealised but still of national significance.
- For the interior fittings including the Grand Organ case and choir stalls designed by Wren's office and the workshop of Grinling Gibbons.
- For the various representations of the building in art and photography including by Canaletto, John O' Connor, Frederick Goff and John Piper.
- For the artistic programme that continues today with new commissions and installations, including Bill Viola, Hughie O'Donoghue, Richard Kindersley and many others.

8.14 **St Paul's Cathedral is of Archaeological Interest:**

- For the potential remains of earlier occupation of the site not removed by the construction of the Cathedral.
- For the 18th century and earlier fabric of old St Paul's within the structure, the majority of the external stonework and fabric being faithful later conservation, restoration and repair.
- For evidence relating to the construction process of Wren's building both within the fabric and also within the ground around the Cathedral.

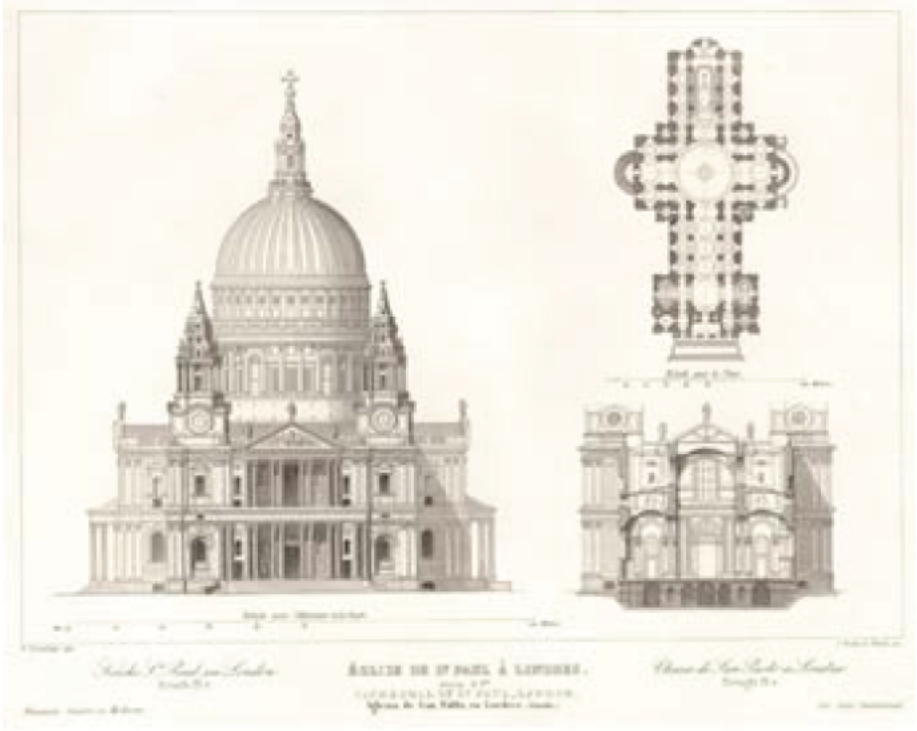
8.15 These interests are the basis for the designation of the Cathedral at Grade I in the National Heritage List for England. Grade 1 listed buildings are a small percentage of the entries on the list and the conservation of their significance attracts the greatest weight under Government policy as set out in the National Planning Policy Framework. The statutory requirements and policy approach for heritage assets is provided in further detail in *Appendix NPBM 3*.

An analysis of the architectural and historical significance of the design

8.16 The new Cathedral has to be seen in the context of English cathedral building established by the Normans and then developed throughout the medieval period. Only by recognising the place of St Paul's within this context can an understanding be gained of the balance between tradition and innovation which is uniquely represented in this building, which was the first post-Reformation cathedral in the country. It was a tradition that Wren knew well as he had been called in to advise on repairs to Salisbury Cathedral and alterations to Westminster Abbey in addition to his involvement with old St Paul's.

8.17 The new Cathedral is on an elevated site, albeit only modestly higher than its surroundings, but the highest point in the city of London. It re-used that of its predecessor thereby maintaining a continuity of worship on the site that had existed for over 900 years. Elevated sites were often used for cathedrals and notable examples in England include Durham, Lincoln, York, Ely, Carlisle, and Lichfield. The choice of an elevated site has obvious symbolic benefits in addition to ensuring visual prominence. This visual prominence, along with the scale of cathedral buildings themselves, were powerful means of communicating the importance of their role. The tradition of using an elevated site has continued into the twentieth century with the striking example of Guildford Cathedral, dominating Stag Hill which announced the newly created diocese in the 1930's.

8.18 Another characteristic feature often found in earlier cathedrals is the Latin cross plan providing for procession and ceremonial as well as for symbolically referencing the crucifixion. This plan form allowed for architectural emphasis at the crossing and the western



end, which was usually in the form of towers. Examples include Durham, Canterbury, Rochester, York, Southwell, Ely, Bristol, Chichester, Lichfield, Lincoln, Ripon, and Wells. This again was an area of intellectual interest for Wren and he was involved in designing new west towers for Westminster Abbey; although ultimately, they were constructed by his assistant Nicholas Hawksmoor. The importance of towers for cathedrals and indeed parish churches continued into later centuries and the provision of a crossing tower and western towers is a feature of the later 19th Century cathedral at Truro enabling it to dominate that city despite the minimal elevation of its site adjacent to the river. The form and visual interplay between these elements of the design of a cathedral emphasized its scale, added to the sense of power and authority and incited wonder in the lay communities that used or visited the building. As forms of architectural display, they also provide distinct character and enable unique building profiles to be created that then become easily recognisable and often iconic.

8.19 Wren's St Paul's re-uses the elevated site of its predecessor and in its final design also employs the Latin plan, but Wren was also concerned about the relationship of his new building to its' context as an intended ornament for the capital; in particular to the traditional approach to the earlier cathedral from the west. The west end of the earlier cathedral was the ceremonial entrance for royal processions and providing a suitable western vestibule for this purpose of greeting the monarch and associated ceremonial was to occupy much of the design development for St Paul's in the 1680's. Wren's proposed City Plan of 1666 prepared in the days immediately following the Fire indicated an intention to have the rebuilt cathedral related to this western approach by establishing a formal, straight avenue along the approximate alignment of Fleet Street and terminating in a piazza dominated by it. The Cathedral would be at an important node in the plan with routes continuing to other civic buildings to the east at other nodes in the plan. However, with the passing of the Great Rebuilding Act of 1670, it was clear that the desired formality and rational urban plan that Wren was aspiring to deliver would no longer be possible. But in order to achieve some of the intended effect he successfully petitioned the Commissioners to purchase land adjacent to the north west corner of the historic St Paul's churchyard to assist in opening up the western approach and give sufficient breathing space to the west front of the new Cathedral. In addition, Wren adjusted the orientation of his new building in comparison with its predecessor for structural reasons, but also because by adopting slight shift to produce a north-east-to south-west axis he managed to achieve a more direct alignment with Ludgate Hill which formed the last part of the principal historic approach from the west.

8.20 In section the new Cathedral maintains the tradition of the taller nave and lower, subservient aisles but disguises this traditional massing behind screen walls that also perform a structural function in buttressing the nave and the dome. The screen walls also ensured consistency of architectural expression, and avoided what Wren described in connection with other projects as "an unhandsome Medley" or "disagreeable Mixture, which no person of good Taste could relish". St Paul's also follows the tradition of providing architectural emphasis at the crossing and west ends but in the hands of Wren it is these elements of the design, in addition to the screen walls, that are innovative both structurally and architecturally and are exceptional in England at this time. Until the construction of St Paul's, the use of the dome was not widespread in England in contrast to mainland Europe and certainly, there was none of the significant scale intended for the Cathedral. On completion the dome was the largest in country, one of the largest in Europe and it ensured that St Paul's remained the highest structure in London until the 1960's.

8.21 In *Parentalia* the memoirs produced by his son, it is claimed that:

"Thus St Paul's is lofty enough to be discerned at Sea Eastward, and at Windsor Westward, but our Air being frequently hazy, prevents those distant Views, except when the Sun shines out, after a Shower of Rain has washed down the Clouds of Sea-coal Smoke that hang over the City from so many thousand fires kindled every morning, besides Glass-houses, Brew-houses, and Founderies, every one of which emits a blacker Smoke than twenty Houses.'

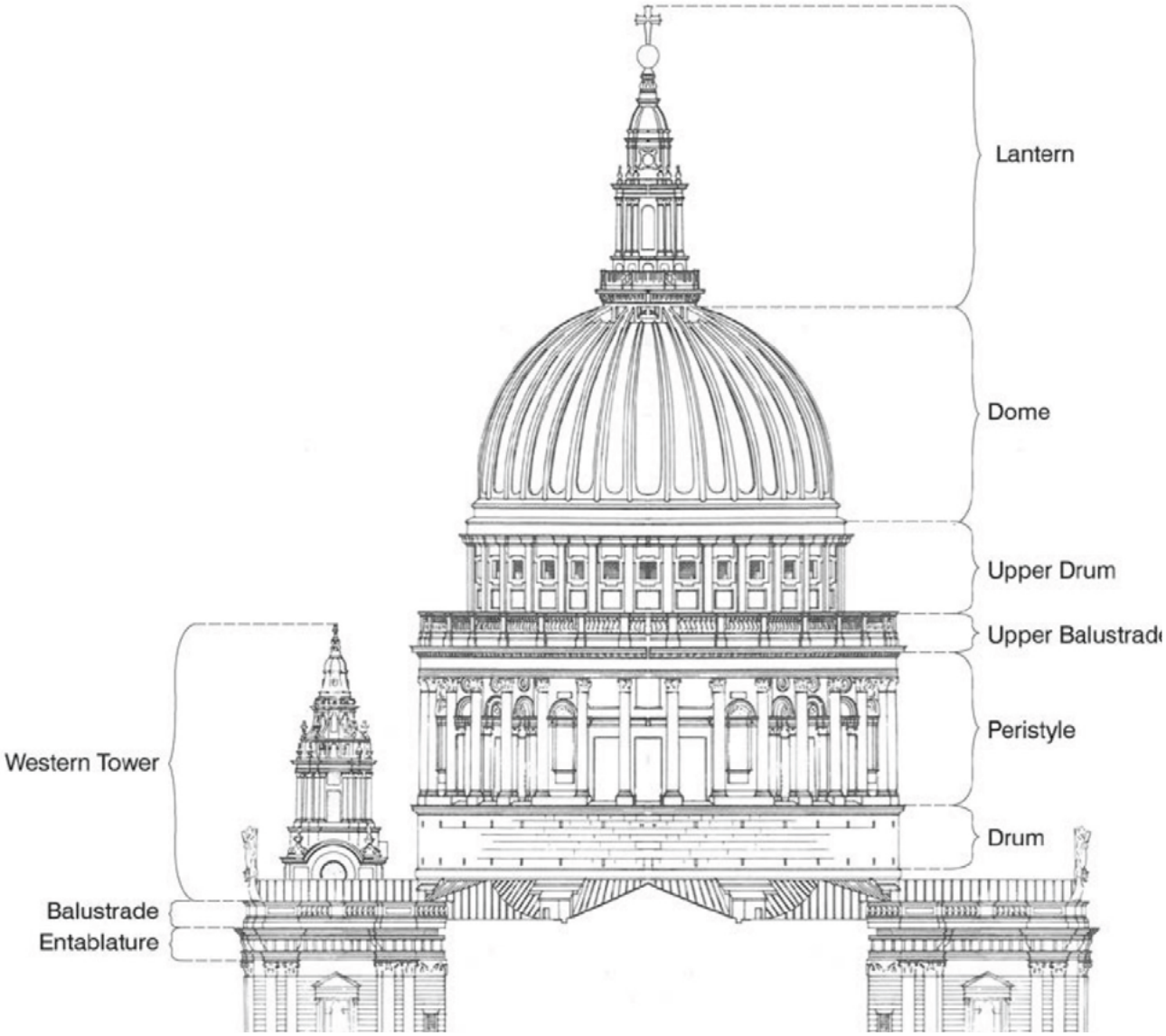
This illustrates that understanding the architectural significance of the cathedral solely through physical experience is and always has been dependent upon environmental conditions which have changed significantly over time. Although it will not of itself be a complete understanding of the intended architectural significance. Some of those conditions even directly affected the appearance of the building as can be seen in photographs of the Cathedral in the 19th and 20th Centuries with its soot blackened lower sections protected by the cornice of the ground floor order from the washing down by acidic rain that resulted in a much lighter colour for the upper sections of the elevation. The understanding of the intentions for the building through an appreciation of its architecture will therefore be different depending upon the distances involved. Broadly speaking at greater distance, the overall silhouette is the most easily appreciated; from intermediate areas of setting the architectural form and massing is appreciable with architectural detail only fully appreciable from within the closer setting of the building.

The dome

"Geometrical Figures are naturally more beautiful than other irregular; in this all consent as to a law of nature. Of geometrical figures, the Square and the Circle are the most beautiful; next the Parallelogram and the Oval."
Wren, Tract 1

8.22 Wren's choice of a domed crossing was not sudden or arbitrary as can be seen by his suggestion of placing a dome on the old cathedral of St Paul's and a dome is a feature in the schematic form of the first new cathedral. It represents an interpretation of early Christian churches as is illustrated in his City Plan of 1666. Throughout the evolution of the design for St Paul's a dome was a central and enduring theme and regarded by Wren as an essential element in making the new building both stately, having more grace in the "remoter aspect" (that is from a distance), but also as a means of conveying its importance in both functional and urban terms. The use and recent development in the design and forms of domes in Europe had been a feature of his recent study in France; although as a member of the Royal Society he and his colleague Robert Hooke had also explored the emergence of the dome as a feature of ancient architecture in the Levant (The Middle East). The structural and mathematical challenges in using such a form must have also have appealed to his scientific interests and the geometrical properties of the dome as a form were also an abiding interest. The geometrical qualities of architecture were, for Wren "the most essential Part of Architecture" and he also noted in his Second Tract that "Geometrical Figures are naturally more beautiful".

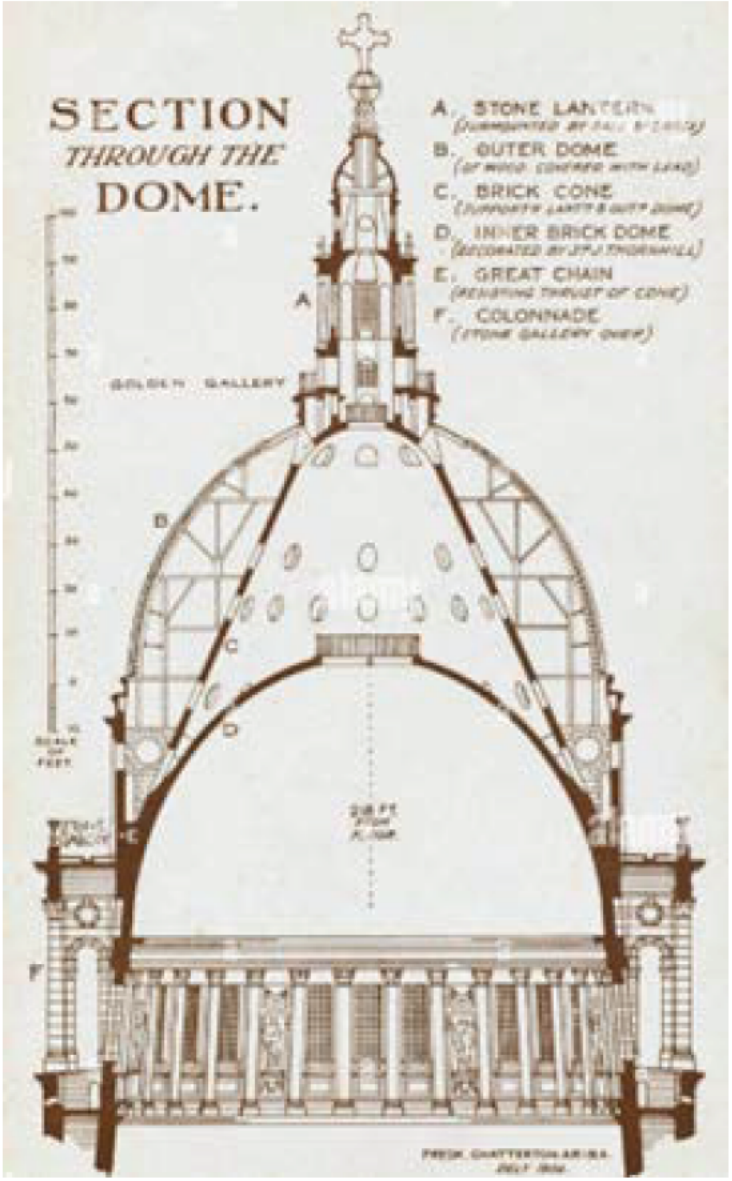
8.23 The continental domes studied by Wren differ from St Paul's although it has been pointed out by Gordon Higgott that the revision to the Warrant Plan which resulted in the addition of the screen walls and larger dome appear to have been influenced by the church of the Hotel des Invalides in Paris by Mansart (1677) which was under construction at the same time. However, unlike those of St Peter's in Rome and the Val-de-Grâce in Paris, the dome of St Paul's rises in two clearly defined storeys of masonry which, together with a lower, unadorned footing, equal a height of about 95 feet. From the time of the Greek Cross design for St Paul's, it is clear Wren favoured a continuous colonnade (or peristyle) around the drum of the dome, rather than the arrangement of alternating windows and projecting columns that Michelangelo had used for St Peter's in Rome and which had also been employed by Mansart in Paris. The peristyle serves to buttress both the inner dome and the brick cone which rises internally to support the lantern, but also provides the large "Basis" upon which the Dome rests. In the finished structure, Wren creates a diversity and appearance of strength by placing niches between the columns in every fourth opening.



The elements of the roof, drum and dome (from the Survey of St Paul's by A.F.E. Poley, 1919)

8.24 Above the peristyle rises the second stage surrounded by a balustraded balcony called the "Stone Gallery". This stage, the upper drum, is ornamented with alternating pilasters and rectangular windows which are set just below the cornice, creating a sense of lightness. Above this attic rises the dome itself, covered with lead, and ribbed in accordance with the spacing of the pilasters. It is pierced by eight light wells just below the lantern, but these are barely visible. They allow light to penetrate through openings in the brick cone, which illuminates the interior apex of this shell, partly visible from within the cathedral through the ocular opening of the lower dome.

8.25 The lantern, like the visible masonry of the dome, rises in stages. The most unusual characteristic of this structure is that it is of square plan, rather than circular or octagonal. The tallest stage takes the form of a *tempietto* with four columned porticos facing the cardinal points. Its lowest level is surrounded by the "Golden Gallery" and its upper level supports a further, small dome from which rises a cross on a golden ball. The total weight of the lantern is about 850 tons.



Section through the drum and dome of St Paul's illustrating the structural ingenuity of the crowning feature

8.26 The ingenuity of the structure of the dome has often been remarked upon and it illustrates an important aspect of the design. The brick cone is required not only to support the lantern but is also necessary because the external and internal profiles of the dome itself are deliberately different for architectural reasons. The external profile is created through the use of a timber structure covered in lead that produces a distinctive curve, and is based upon Bramante's design for St Peter's published by Serlio; whilst the profile of the inner dome, constructed in brick, has been carefully considered in relation to the volumes and proportions of the interior spaces of the cathedral and is therefore of a different profile. As described in *Parentalia* the reason for such an approach was:

'.....It was necessary to give a greater Height than the Cupola would gracefully allow within, tho' it is considerably above the Roof of the Church; yet the old Church having had before a very lofty Spire of Timber and Lead, the World expected, that the new Work should not in this Respect fall short of the old (tho' that was but a Spit, and this a Mountain) He was therefore obliged to comply with the Humour of the Age, (tho' not with ancient Example, as neither did Bramante) and to raise another structure over the first cupola; and this was a cone of brick, so built as to support a stone lantern of an elegant figure, and ending in ornaments of copper gilt.'

The consideration and care taken by Wren regarding the visual impact of this, the crowning feature of his design, is integral to its architectural significance and central to an appreciation of that significance.

8.27 It is also important to recognise that in addition to its visual effect Wren also had to justify the use of a dome as a way of expressing meanings of relevance to Anglicans by reassuring the Commissioners that it was "proper" in an architectural sense for an English Cathedral, in light of the association of domes with Catholic Europe. Wren emphasised that a dome on St Paul's (as proposed for the old cathedral and carried through to the new design) would become "an Ornament to his Majesty's most excellent Reign, to the Church of England and to this great city". The dome was seen by him as symbolising the national unity between Church and Crown and whilst novel or unfamiliar it would in time become recognised as a national "ornament". In this latter claim, Wren has been proved right.

St Paul's dome from the south east where the plain base, the columned peristyle, the upper drum the dome itself and the crowning lantern can all be appreciated as the central crossing point of the design (picture credit: Historic England).

The west towers

8.28 The towers were constructed from 1705-1708 after publication of the "authorised" engravings of the completed design for the Cathedral in 1702. In that published design the towers are shown as cylindrical in form and clearly based upon Bramante's Tempietto in Rome. In 1700 construction on St Paul's was reaching the level of the cornice on top of the church, but it then ceased, commencing again in 1705. Within that period in 1700-1702 Hawksmoor and William Dickenson drew several designs in which the belfries and clock stages of the towers were progressively enlarged. The towers that then emerged, following a further re-design by Wren in 1704-5, are of very different form and character from those in authorised publication. Their height was increased and their structure is organised into three, diminishing stages. Above the main cornice, which unites the towers with the portico and the outer walls, the details are boldly scaled, in order to read well from the street below and also from a distance. The towers rise above the cornice from a square block plinth which is boldly modelled with simple panels flanking large oculi; that on the south being filled by the clock, while that on the north is void.

8.29 The towers are composed of two complementary elements, a central cylinder rising through the tiers in a series of stacked drums and paired Corinthian columns at

The SW Tower of St Paul's Cathedral (picture credit: Historic England).

the corners, with buttresses above them, which serve to unify the upper drums with the lower stage on which they stand. The entablature above the columns breaks forward over them to express both elements, tying them together in a single horizontal band which is an architectural "device" based on ancient models studied by Wren. The cap, an ogee-shaped dome, supports a gilded finial in the form of a pineapple. The vertical emphasis of the towers is provided by the columns and buttresses and enhanced by the urns and finial decorations placed above them, all of which present a lively profile and character that contrasts with the stately character and simpler silhouette of the central dome. The three features, towers and dome, appreciated together illustrate the evolution of Wren's design approach which included testing architectural conventions and they therefore provide an important understanding of the architectural significance of the building.

8.30 Equal care was paid by Wren to the silhouette of the main body of the cathedral which was designed with the cornice containing brackets as the horizontal, terminal feature. The addition of the balustrade above the parapet in 1717-19 slightly weakens the intended expression of the transept pediments and the silhouette of the building and was built against the wishes of Wren. In a letter to the Commission on 28 October 1717 the then 85-year-old Surveyor objected to the principle of a crowning balustrade, which he described as being "contrary to the principles of architecture, and as breaking into the harmony of the whole design" before famously remarking, *'ladies think nothing well without an edging'*.

West front and towers "elevated" view

Elevations and west front

8.31 The function of the western end of the cathedral was as the ceremonial "vestibule" leading to the Nave and subsequently the Choir. The importance of this section of both plan and elevation is indicated by the fact that of the surviving design drawings for the Cathedral fabric prepared between 1675-1710 about a third (80) relate to the west end. The intention from an early stage was to provide spaces on ground and first floor north and south of the central entrance. The precise form of the spaces evolved alongside proposals for the treatment of the western portico which included the use of giant columns and a re-interpretation of Jones' earlier portico before the two-storey form was settled upon. The uses of the spaces included a library, the trophy room and chapels on the ground floor. The west front is strongly articulated with the lower portico comprising 6 pairs of Corinthian columns. The intercolumniation is subtle, with the central space wider than those flanking to emphasis the central axis of the design. The upper, pedimented portico follows a similar spacing but using Composite columns. The porticos are framed by the outer rusticated lower stages of the towers separated by a narrower bay either side. The paired pilasters to the outer bays are surmounted by the statues of the Evangelists. The simple geometry of the square bases of the free-standing towers containing the oculi under strongly expressed segmental cornices is readily appreciated above and their geometry complements that of the dome when seen in combination. The strongly expressed depth of the central porticos with their deep shadows and modelling contrasts with shallower modelling of the elevations either side characterised by the rustication and decorative cornices and swags.

8.32 There is a similar contrast to the depth of modelling to the north and south transepts with the semi-circular porticos projecting boldly and their modelling echoed by the drum of the dome above. The extensive surface rustication is balanced with concentrated areas of carved decoration including in the spandrels of the arched windows on the ground floor that form, in effect, a continuous horizontal band of foliage decoration. This band incorporates the capitals of the lower orders across the façade. This arrangement is repeated above but with added emphasis created by the vertical garlands of foliage and fruit either side of the main transept window and crowned by the sculpted pediment and free-standing statues above.

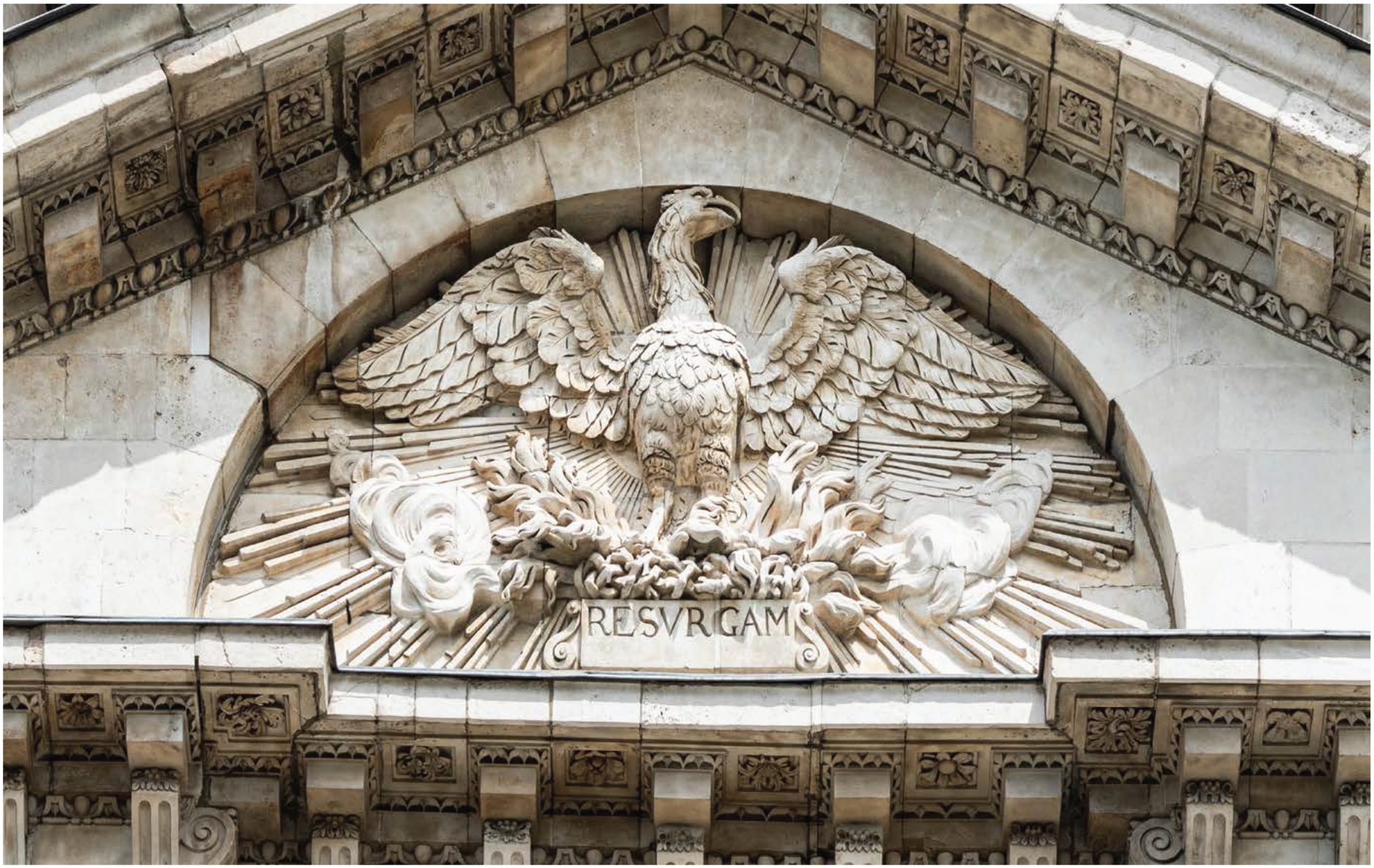
South Transept and Portico from Carter's Lane: note the strongly expressed semi-circular form of the portico and the rich decorative carving in bands across the ground and first floors. The statues crown the vertical articulation of the façade organised by the Corinthian and Composite pilasters usually paired (Picture credit: copyright Historic England).

The sculptural decoration and its iconography

8.33 The architectural sculpture of the Cathedral is often overlooked in comparison to the appreciation of the dome, porticos and towers of Wren's design. However, collectively, the architectural sculpture is one of the greatest ensembles of the English Baroque. The west pediment contains the *Conversion of St Paul* by Francis Bird (1706) which is a dramatic composition clearly informed by Italian, Baroque examples. Bird was also responsible for the reliefs depicting scenes from the life of St Paul around the west door.

8.34 In 1718-21 statues were added to the elevation of the west front. At the lower corners of the two towers are the Evangelists with their associated symbols, all of whom are depicted as seated and writing in books. On the pediment between the towers are three standing statues, St Peter on the north, St Paul to the centre and St James to the south. A further five statues were added to the north transept in in 1720-4 depicting St Barnabus, St Philip, St James the Less, St Jude and St John the Baptist. Five statues were also originally placed on the south transept although the three central ones were replaced in 1898. These were St Thomas, St Andrew and St Bartholomew. At the corners the Bird originals of 1722-4 survived, depicting St Simon and St Matthias. The majority were the apostles of Jesus charged with proclaiming his message and therefore the symbolism of their prominent position on the principal axes of the Cathedral also resonates with the liturgical purpose of the building. St Pauls was one of the first buildings in the City to have groups of statues along its roofline- principally the pediments. These would have originally stood out against a clear sky and formed part of the skyline of the building. They would also have been an unusual and novel feature for a building in the City at this time.

8.35 One element of the sculptural iconography has additional significance which has increased during the course of the subsequent history of St Paul's. In the south portico pediment is the phoenix carved by Caius Cibber as a symbol of resurrection following fire. It is reported that when Wren was on site at St Paul's to draw out the circular dimensions of his dome, he sent a workman to find a piece of stone to mark the centre of the figure and he returned with a piece of tombstone upon which the word Resurgam! (I will rise again) was carved, thereby inspiring the subject of the decoration in the pediment. In light of the subsequent attacks on the Cathedral including by suffragettes, in the two World Wars and those subsequently planned by terrorists, the concept of resurgence has become particularly attached to this cathedral.



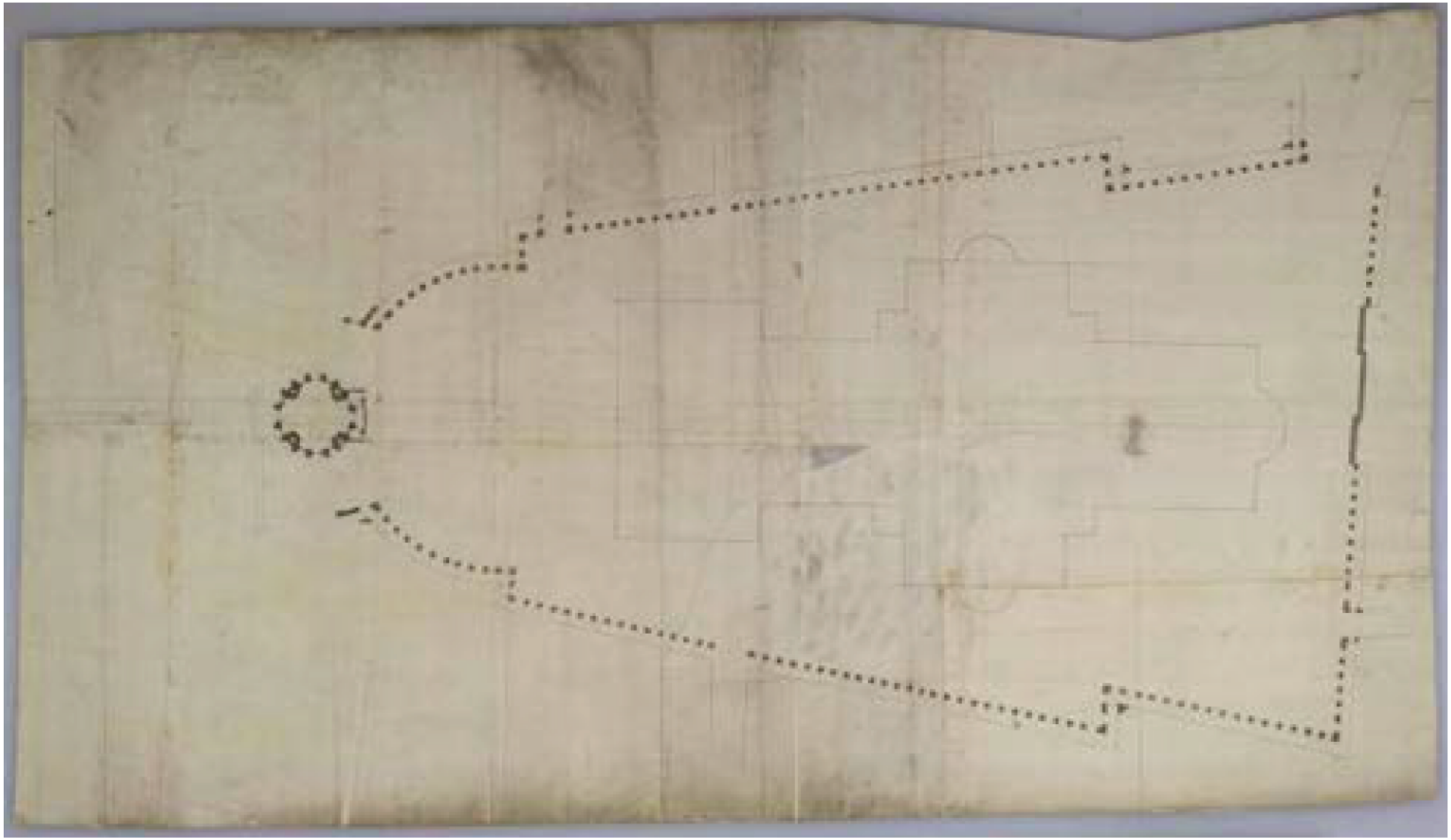
The Phoenix and Resurgam in the South Portico Pediment by Cauis Gabriel Cibber (picture credit: copyright Historic England).

St Paul's Churchyard: the close setting

8.36 The earliest known scheme to improve the Cathedral churchyard is an outline study by Wren and Hawksmoor, drawn over a survey of the whole precinct prepared by William Dickinson soon after he joined the Surveyor's office in 1696. Sketched loosely in pencil – probably by Wren – are the lines of curving frontages on the north and south sides which narrow to a circular space on the west, where Ludgate Hill meets the churchyard. Within this space is a large rotunda on axis with the Cathedral. Hawksmoor redrew the outlines in ink, including with what appears to be a colonnade, to give the piazza a symmetrical, wedge-shaped plan, and also drew the whole plan separately to show the rotunda with internal apses and a grand staircase on the east side. The churchyard scheme – previously dated around 1710 – must have been prepared before the north and south transept steps were built to modified plans in 1698–99 because the completed steps disrupt the overall symmetry of the ground plan and were first shown in engravings of 1701.

8.37 The Building Committee's earliest discussions about the churchyard in 1701–03 were restricted to the removal of two blocks of houses on the north side of the nave. Clearing these houses in 1710 allowed the construction of the churchyard railings. Railings were a new feature in the City at this time as there were no known railings on pre-Fire buildings and they were part of the innovative features that characterised the Cathedral. Wren had proposed several separate railed enclosures around the Cathedral in wrought iron, including one for the statue of Queen Anne (completed in 1712) on the west side. However, in January 1710 the Commission rejected Wren's scheme in favour of a more extensive enclosure bounded by larger, cast-iron railings. The revised scheme drawn by Dickinson in 1709 shows railings in a straight alignment along the north side of the churchyard which then curve around the east end of the Cathedral in close proximity to the apse. The railings along the southern boundary of the precinct are shown attached to the outer walls of the south transept before continuing to create a curved enclosure to the west of the Cathedral with a gate at its apex.

8.38 The great steps at the western end of the Cathedral shown on this plan were of two flights and the landing and lower flight were enclosed by outward-curving walls and railings. These steps were rebuilt in 1872 by the Surveyor FC Penrose, who reverted to an earlier, 1701, plan prepared by Wren. The railings that currently survive, principally along the northern side of the current churchyard are on lower plinth walls and are not in their original positions.



Finished plan of the churchyard by Hawksmoor 1696-7 which illustrates the proposal for a colonnade around the perimeter ©St Paul's Cathedral

The Commission on City Churches and the relationship with St Paul's

SB2: Summary of relationships between St Paul's and the City Churches

Architectural Relationships

- The use of stepped geometrical forms in churches and Cathedral towers.
- The variations on the Baroque style centred on Wren and his circle of assistants and collaborators.
- The shared role of Wren and Hawksmoor as architects for the Cathedral and the Churches.
- The use of Portland stone and lead in both churches and Cathedral.
- The recognition of the architectural effect on the skyline produced by the contrast between the mass and form of the Cathedral silhouette the delicate forest of spires and towers of the churches.
- Use of the same craftsmen and masons including Edward Strong and Nicholas Stone.

Historic relationships

- The role Cathedral and churches make in illustrating the resurgence of London as a new city following the fire;
- The shared importance of re-instating places of worship on their historic sites.
- The appointment of a Commission for rebuilding but with Wren as Surveyor for both.
- The shared source of funding from the Coal and Wine Tax.
- St Benet Paul's Wharf sited originally on the river at the wharf where the material for the Cathedral was landed.

Visual relationships

- The deliberate contrast of scale and silhouette on the London skyline.
- The concentration of the spires and Cathedral illustrating the position of the historic City of London in approaches from the river and the south.

Cultural and intellectual relationships

- The artistic representations of the skyline by Canaletto and others.
- Visitor commentaries and publications highlighting the distinctive contribution that Cathedral and church spires make to the identity of London.

8.39 Alongside St Paul's, the City Churches are Wren's principal contribution to the historic appearance of London and until relatively recently they remained the outstanding accents of the City and enlivened its skyline. At the time of the fire there were 107 parish churches in the City of London of which 85 were burnt. Only 51 were rebuilt following the Fire. The replacements were funded, like St Paul's, from the Coal Tax enacted in 1670 and they received a third of the income generated, which was the same allocation as that for the Cathedral. As Surveyor to the Commission established for their construction Wren was instructed to *"direct and order the dimensions, forms and models of the said churches"* and was supported by Edward Woodroffe and, subsequently, John Oliver. Alongside Wren was Robert Hooke who had been collaborating with him on the designs for The Monument and, on the basis of analysis of surviving drawings, several of the City Churches were probably of his design rather than that of Wren.

8.40 A number of the City Churches were actually being repaired and reconstructed before the Commission could direct their rebuilding so the involvement of Wren in that process would have been minimal. It is also the case that where fabric had survived, Wren was reluctant to demolish it, unless absolutely necessary. Therefore, whilst it is clear that Wren was in overall control of the rebuilding programme, the design of individual examples was often collaborative. The liturgical requirements for parish churches at this time focussed upon the "Auditories" or need to be able to both see and hear clearly. This encouraged the use of galleries and provided opportunities for Wren to experiment with both longitudinal and centralised plans in a similar process to that seen in his design approach for St Paul's.

8.41 In most cases the churches were partly hidden by surrounding houses or faced narrow alleys where architectural display would not have been appropriate, but even the smallest church would have been provided with one formal elevation for show. However, the focus for architectural display for the parish church was the tower or spire, which continued a tradition of City parishes which were proud of their towers and steeples and the bells they housed and therefore required them to be re-provided.

8.42 The towers of the churches were usually square in plan and straight-sided, although there were exceptions. Lower stages would usually have round headed or circular windows but for the bell stage above, straight sided openings could be used. The three major stone towers of St Bride's, St Mary-le-Bow and St Magnus use paired pilasters flanking the bell stage. The addition of a steeples above the tower was often a later consideration and it seems that Wren may have arrived at a vision of a forest of steeples extending across the skyline of London gradually. Of the major steeples, only St Mary-

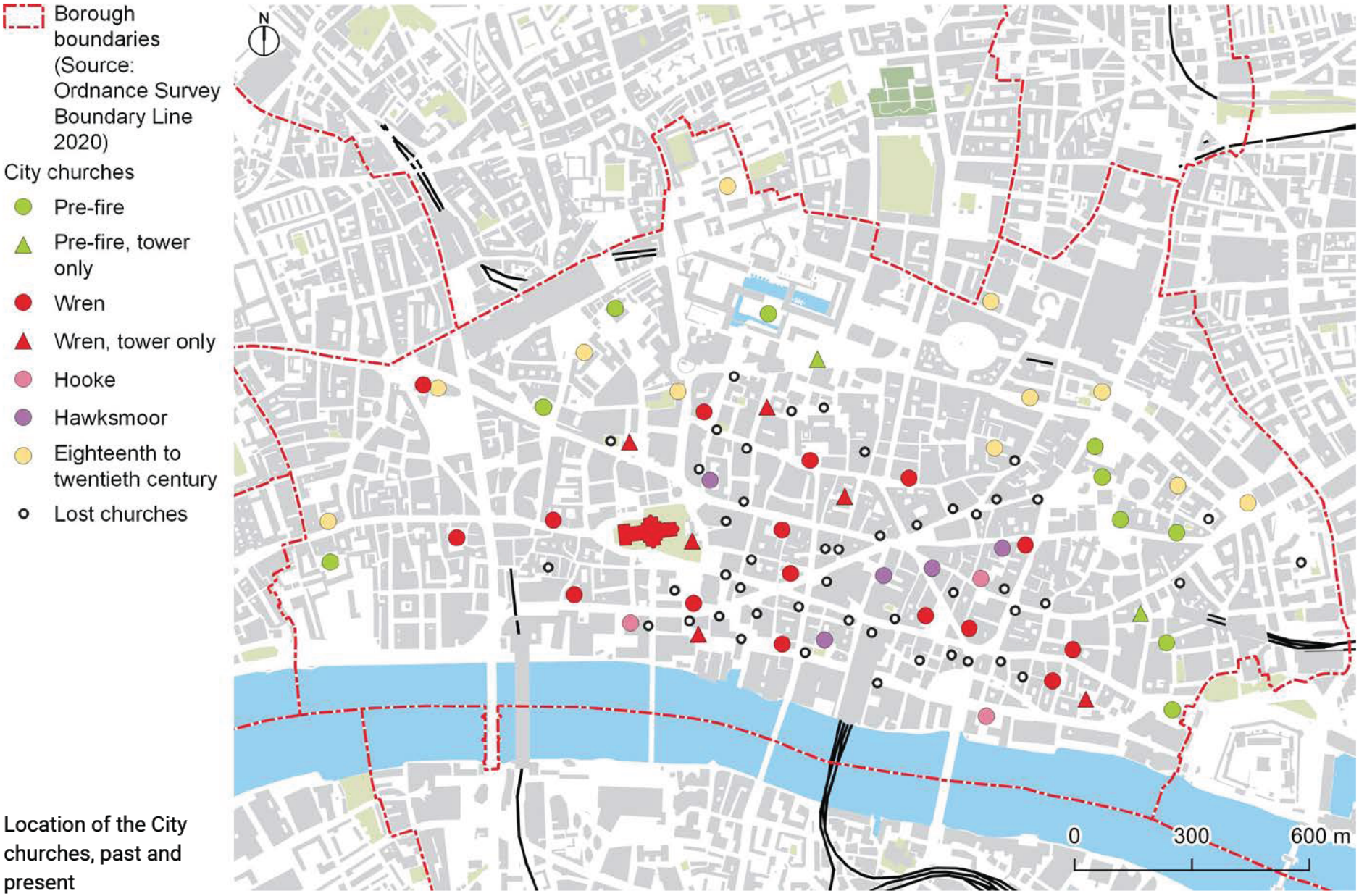
le-Bow was designed and executed in the first wave of church building (up to 1680) although it was clear that St Magnus and St Bride were designed to have steeples from the start, albeit built slightly later. Wren's office would therefore have been busy designing steeples into the first decade of the 18th Century at the same time as the towers of St Paul's were being designed.

8.43 At the time when several of the steeples were being designed and added to the City Churches, Wren would have been busy at St Paul's, the Greenwich Hospital and Hampton Court, so delegation and involvement of others in their design and construction is almost certain. The collaboration would have been with Robert Hooke and also Nicholas Hawksmoor, who worked in the Surveyor's office between 1695 and 1701. Drawings for the steeple of St Edmund by Hawksmoor survive although the steeple was not actually built until 1706-7. This raises the interesting possibility of the extent of collaboration and discussion between Wren and others, including Hawksmoor, on the evolving design of the west towers of St Paul's and their more dynamic Baroque character in contrast to the calmer, High Renaissance character of the dome.

St Paul's Cathedral and city from the South by S and N Buck 1749

City Churches designed by Christopher Wren in whole or in part

- Christ Church Newgate Street 1677-87 bombed but tower 1703-4 remains
- St Andrew by the Wardrobe 1685-94 (reconstructed 1961)
- St Andrew Holborn survived the fire repaired by Wren 1684-86 tower reclad by Wren and raised 1703)
- St Anne and St Agnes Gresham Street 1676-87 (reconstructed after WWII)
- St Benet Paul's Wharf 1677-85
- St Bride's Fleet Street 1670-84 (interior reconstructed in 1950's)
- St Clement Eastcheap 1683-7
- St Edmund King and Martyr 1670-9
- St James Garlickhythe 1686-72 (Tower 1717)
- St Lawrence Jewry 1670-1677 (Spire is a modern replica)
- St Magnus the Martyr 1671-84 Tower 1703-6
- St Mary Abchurch 1681-6
- St Mary Aldermary 1679-82 (some doubt as to extent of Wren's involvement); tower 1701-4 either Hawksmoor or Dickinson
- St Mary At Hill 1670-74
- St Mary Le Bow 1670-80; Steeple 1678-80 first one erected after the Fire
- St Mary Somerset: 1685-94; only tower remains restored in 1956
- St Margaret Lothbury 1683-92 (Tower 1698-1700 by Robert Hooke)
- St Margaret Pattens East Cheapside 1684-87; tower 1698-1702
- St Martin Ludgate 1677-86 with Hooke
- St Michael Cornhill no Wren involvement but tower by Dickinson and then Hawksmoor 1717-1722
- St Michael Paternoster Royal 1685-94; tower 1713-7 possibly by Hawksmoor
- St Nicholas Cole Abbey 1672-8; reconstructed 1961 and upper tower rebuilt
- St Olave Jewry 1671-79 demolished apart from tower now converted as rectory for St Margaret Lothbury
- St Peter upon Cornhill 1677-84 with Hooke
- St Stephen Walbrook 1672-80; spire 1713 probably by Hawksmoor
- St Vedast Alias Foster1695-1701 (tower and spire 1709-12 possibly by Hawksmoor)



Location of the City churches, past and present

Historic England

St PAUL'S CATHEDRAL

8.44 When Wren and his office were designing the City Churches there was little precedent for classical steeples. Inigo Jones had designed small towers for old St Pauls and at Whitehall, but the idea of replacing the steeple which was a priority for the city parishes, but in a classical form, was a new challenge. St Mary Le Bow on Cheapside was Wren's first invention. The bell stage has paired pilasters flanking simple arched openings, a form he used on the Cathedral and also on other churches. Above, a circular *tempietto* supports bows or arches clustered around a drum which in turn supports a further *tempietto* but of square section. The upper console of the steeple is then crowned with an obelisk. The Steeple of St Bride on Fleet Street (1702-4) is related to the proposed termination of the crossing in the Warrant Design for St Pauls, which also featured diminishing octagonal *tempietti*. In this steeple there are four stages each with a pilaster order on a pedestal; but whilst the pilasters diminish in height from stage to stage, the pedestals actually increase which achieves the effect of upward lift. The crowning feature is again an obelisk. The third church steeple which is based on designs that had evolved earlier is St Magnus the Martyr. The steeple constructed in 1705 also has the square bell stage with paired pilasters, but above an octagonal *tempietto* on a simple base is crowned with an ogee dome and spire. These three steeples were contemporaneous with the design and construction of the west towers of St Paul's Cathedral.

St Mary-Le-Bow 1678-80

St Brides 1702-4

St Magnus the Martyr 1705

8.45 The knowledge that the great Cathedral and the towers and spires of the City Churches were evolving and emerging in parallel adds to an understanding of their significance. In particular the architectural questions regarding the single authorship of an architect, as opposed to collaboration. The role this had in the development of Wren as a Baroque architect is central to the special interest of these buildings. This is in addition to the architectural impact on the skyline of London created by these buildings which became famous across Europe. Visitors were struck by the delicate “forest” of varied steeples and towers as a counterpoint to the might and repose of the dome of the Cathedral, the mother church of the diocese. Being able to actually appreciate these features and see this symbolic and functional relationship between a cathedral and so many of the parish churches within its diocese was unique in the English context and the result of the compact nature of the historic city. Only 24 of the 51 churches rebuilt by Christopher Wren’s office after the Great Fire of London remain; many have required extensive restoration.

The Monument and its relationship to St Paul's

SB3: Summary of the relationships between St Paul's and The Monument

Architectural relationships

- Both structures originally planned as part of new urban layout based on continental models in the Baroque manner.
- The use of architectural scale for effect; both the tallest structures of their kind when built.
- Classical architectural language.
- Both constructed of Portland stone.
- Designed by Wren and Hooke who worked together on the City Churches and were on the Commission for Rebuilding together.
- Architectural decoration and reliefs designed and executed by the same craftsmen.

Historical relationships

- Both symbols of the reconstruction of the City as well as commemorating its destruction.
- Both symbols of the commitment of the monarch to the future of the City.
- Both drawing on precedents and associations from ancient empires and architecture.
- Both used the river for the transport of materials for construction.
- Both new building types in a national context.

Visual relationships

- Intended visual dominance of the skyline of the City.
- Intended visual relationships with the spires and towers. of the City Churches.
- Both structures had viewing galleries and were intended to provide views to and from each other amplifying their symbolic roles.

Cultural and intellectual relationships

- Illustrations of the intellectual relationships between Wren and Hooke as men of science and members of the Royal Society.
- The use of both structures for scientific experiments and purposes.
- The use of ancient precedents for design and the intellectual associations with those precedents.

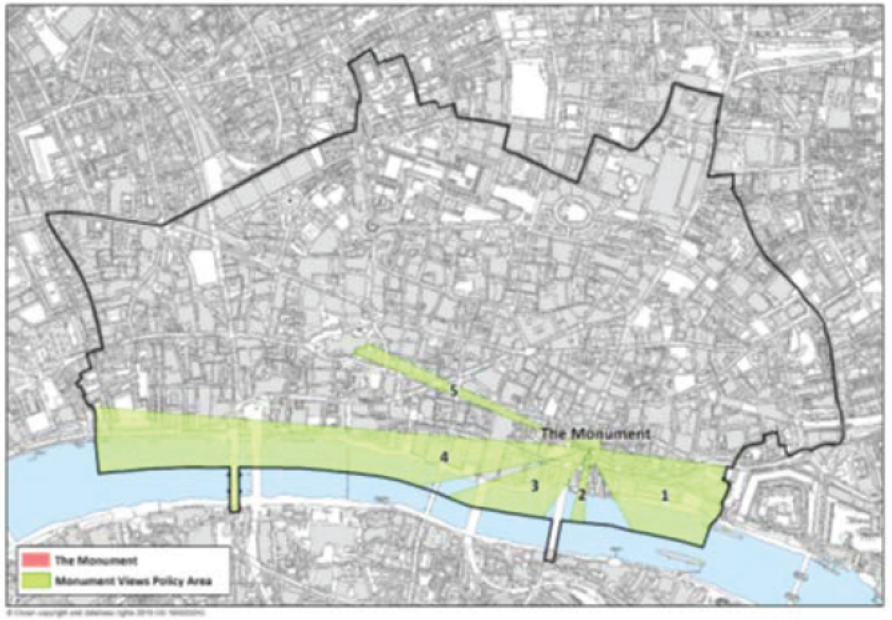
8.46 The Monument to The Great Fire was designed by Robert Hooke appointed Surveyor to the City of London and chief assistant to Christopher Wren. The Monument served a dual purpose. In addition to commemorating the disaster and celebrating the new city that rose from the ashes of the old, it was also designed to be a scientific instrument. The column was a giant Zenith telescope enabling experiments with gravity and pendulums with a small laboratory below ground. It is sited on Fish Street Hill, c200 feet from the site where the Great Fire originated in Pudding Lane and was started in 1671, taking six years to complete (1677) partly due to difficulties in obtaining Portland Stone in the required dimensions for the structure but also because safe transport of the materials was difficult because of the Anglo-Dutch War of 1672-4. The manner in which The Monument was set within the city reflected a key concept of Wren's Plan for London where important buildings were placed on main junctions and given space round them. The Monument was built on the border of an existing road which led directly from London Bridge and to the other side was a square, originally larger than the current urban space. Both St Paul's and The Monument therefore share the same significance in illustrating the approach of Wren to city planning.

8.47 In addition to sharing common materials, transported by river and landing at St Paul's wharf, both structures were decorated by the same craftsmen and sculptors. The decorative panel on the west face of the base of The Monument was carved by Danish sculptor Cauis Gabriel Cibber, who was responsible for the Phoenix on the south pediment of St Paul's Cathedral. The bas relief depicts both the past (the Great Fire on the left) and the future, the reconstruction of the City on the right.

Sitting on broken masonry in the bottom left corner, holding a sword, is a female figure, who represents the City of London. She sits above a dragon, which has been the symbol for the City of London for centuries. Standing behind her with wings is Father Time, helping her back to her feet. He also has the help of Mercury, representing Industry, who is holding a caduceus, a decorated staff that is the symbol of trade, commerce and negotiation. On the right is a group of figures, the central and most prominent is King Charles II dressed as a Roman Emperor with a baton of command in his right hand. He gestures towards the personification of Architecture, who's holding a square and compass in her left hand, and the plans for the new City of London in her right. Liberty stands behind Architecture, watching, and holding her cap bearing the word Libertas.

8.48 The Monument is a rare, pre-Georgian example of public commemoration and a rare example of a colossal column in Britain at the time, which inspired a building typology that was subsequently adopted in following decades and centuries. Later examples include the Column of Victory monument to the Duke of Marlborough at Blenheim (1727-30); the memorial to Charles, 2nd Earl Grey in Newcastle upon Tyne (1838); Nelson's Column (1840-43); and the Elveden War Memorial column in Suffolk, dedicated to the fallen of the villages of Elveden, Eriswell and Icklingham (1921). It remains the tallest isolated column in the world.

8.49 Both St Paul's (in particular its dome) and The Monument were novel and the first structures of their type in the country and therefore a source of interest. They were both an attraction to visitors from the time of first construction and both included viewing galleries from which to survey the city. Both were designed to have a visual presence across wide sections of the Capital and that visual prominence was central to their role. This historic role and relationships have been acknowledged in specific policy guidance *(Corporation of London Monument Views Study SPD December 2020)* and the area covered by the policy incorporates and overlaps with important parts of the setting of the Cathedral.



The Monument Views Policy Area from the Views Study SPD December 2020