European Heritage Awards / Europa Nostra Awards (2026)
1874-Conservation and Adaptive Reuse 1. Conservation & Adaptive Reuse

Elizabeth Tower

VbLMbZgW

Entry details

General information

Main country of application	United Kingdom*
Name of the building, site or work of art	Elizabeth Tower

Address of the building, site or work of art

> Palace of Westminster
>
> London
>
> SW1A 0AA

Type (select one type only, as applicable):	✓ Building

Brief description of the project

> The Elizabeth Tower, housing Big Ben, is the most famous clock tower in the world.
>
> This is the most comprehensive refurbishment in the history of the tower and the wider Parliamentary Estate. Previous refurbishments have been undertaken every 25-30 years. This project, however, has an intended life of 50 years, ensuring it remains the face of Parliament and democracy throughout upcoming major refurbishments to the rest of Parliament – maintaining it as a standard-bearer of exceptional restoration. The project exemplified Victorian engineering and innovation, and its refurbishment envelopes conservation, repair, and restoration with sensitive new additions for accessibility and sustainability.

Start date of the project	2017-07-16
Completion date of the project	2022-12-16
Website(s) of the project/nominee	https://www.parliament.uk/

Facebook page of the project, if any	https://www.facebook.com/ukparliament/
Twitter page of the project, if any	https://x.com/ukparliament
Instagram page of the project, if any	https://www.instagram.com/ukparliament/
Does the site or heritage in question have national/regional/ local cultural heritage designation or protection status in its country?	Yes

If yes, please specify:

> Grade I Listed

Is the site or heritage in question included on the UNESCO World Heritage List, either as a single World Heritage Site or as part of one larger site? If so, please specify which one.

> Palace of Westminster and Westminster Abbey including St Margaret's Church

Is the site or heritage in question designated as a European Heritage Label? If so, please specify which one.

> No

If relevant, is the site/heritage accessible to the public?	Yes

What steps have been taken to ensure that the site / project is inclusive and accessible to as wide an audience as possible?

> Accessibility was improved through new lighting, non-slip finishes, exhibition pause spaces, and a bespoke lift, alongside virtual tours and updated ticketing, ensuring safer access, wider engagement, and broader visitor inclusion.

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Concise summary

Concise summary

The Elizabeth Tower is the pinnacle of the Palace of Westminster and the defining icon of London worldwide: the symbolic heartbeat and timepiece of the nation. Its triumphant restoration is a testament to the meticulous conservation and repair of a global landmark, to craftmanship, and the integration of modern engineering techniques.

At the project's inception in 2015, the Tower and The Great Clock were overdue their next repair cycles. The subsequent conservation and refurbishment project has been the most extensive in its 160-year history. Our objective was to undertake comprehensive repairs, whilst undoing harmful previous interventions, and extending its next refurbishment lifecycle to 50 years; safeguarding its future as an indispensable European cultural monument and heritage site.

Works included comprehensive restoration to the clockface, mechanisms, and decorative elements; redecoration and re-gilding of the cast-iron roof tiles; and extensive stone repairs. In the belfry, cracked asphalt waterproofing and a 1950s brick stair enclosure were removed, re-instating the open, original appearance and materiality with new Hopton Wood limestone flooring reinstating the original finish. The brick stair enclosure was replaced with a new glass enclosure, protecting against rain and water ingress whilst reinstating the view of Big Ben when you enter the belfry.

This glass enclosure was extruded, allowing the addition of a platform lift into the belfry from the level below, connecting with a passenger lift to the clock mechanism room and other floors. All existing mechanical and electrical systems were replaced: works included the installation of new LED lighting to the clock dials and belfry and the addition of humidity-controlled conservation heating, which combined with breathable paint systems solved condensation problems.

Purcell's approach marked Parliament's first use of BIM Level 2. This was instrumental in the effective management of the external stonework package – numbering c.1,000 repairs – and c.3,800 cast iron elements. The completed BIM model provides a rich and thorough heritage data tool, used to inform other repairs.

Specialist craftspeople from all over the UK were involved in the project: using traditional trades including stone masonry, gilding, glass cutting and horology. The project has invested in and preserved these heritage skills, in addition to preserving a global heritage asset.

The completed project has seen the celebrated tower rejuvenated, restored, and brought into the 21st century with modernised facilities, ensuring it will continue to define the experience of London for many visitors.

Historical background

Historical background with dates

The Grade I-listed Elizabeth Tower is a world-renowned symbol of British democracy, recognisable across the globe.

The tower that we know and treasure today was built after a fire in 1834 devasted the majority of the Palace of Westminster. The tower was the last work of Augustus Pugin, who died age 40 in 1852, seven years before the Great Clock was completed and began ticking in 1859.

The tower suffered extensive damage in the second world war, followed by successive inappropriate repairs using non-breathable materials, which were removed in this project. In 2012, the tower was renamed Elizabeth Tower in honour of Queen Elizabeth II's Diamond Jubilee.

Throughout its 160-year history, the tower has undergone several changes, including restoration work in the 1930s, 1950s, and 1980s. This, the most extensive conservation project, commenced in 2015 and concluded in 2025, ensuring the tower's preservation for future generations.

Value and significance in its local/regional/national context

The Elizabeth Tower, or "Big Ben", is one of the most recognisable and popular British landmarks and the world's most famous clock tower. Synonymous with the city of London, it is one of the most photographed places in the UK, and has been portrayed through art, TV, and film, countless times.

The Elizabeth Tower, Big Ben and the Great Clock are some of the best examples of the creativity and ingenuity of Victorian Architecture and engineering, having lasted 160 years. The tower is the symbol of British democracy and unity of the member countries of the United Kingdom, with ornamentation containing symbology representing all parts of the UK.

Its cultural significance and heritage value reaches far beyond the UK. Visitors and tourists are overwhelmingly positive about the tower as a UK icon, its conservation and refurbishment, and share the joy of the reinstated blue clock dials.

Former and new use of the building/site, if applicable

The usage remains as it was; the world's most recognised and celebrated clock tower.

State of conservation of the building/site/work of art before the project commenced

> The external stonework and windows were in fair condition, but internally, the building suffered from both water ingress and condensation due to failed 1950s waterproofing and non-breathable finishes introduced after the Second World War. The cast-iron roof and clock dials, last refurbished in 1984, were suffering corrosion, and required repair, redecoration and re-gilding. The Great Clock, in use since 1859, required a major overhaul to ensure reliable operation for the next 160 years including disassembly and temporary removal of the clock hands. Building services and fire systems required replacement fit for the 21st century, along with required accessibility improvements.

Conservation work undertaken

Aims and objectives of the project.

> The overriding objective of the project was to ensure the future of one for the world's most famous and celebrated buildings for the benefit of future generations.
>
> There was a requirement to undertake essential maintenance and repairs of the great clock itself, in continued use since 1859, ensuring another 160 years of reliable operation. This necessitated removal of the clock hands, and the disassembly of the clock, which required that the building be scaffolded.
>
> Endemic problems with the structure included water ingress, condensation, poor access and replacement of end-of life electrical services.
>
> The scope was built upon survey work and optioneering, ascertaining the condition of the tower and looking at the best way to conserve and repair for the long term.
>
> Surveys identified the need to undertake major stonework repair, and refurbish the cast iron roof structure and tiles, comprising 1/3 of the height of the tower.
>
> The clock dials suffered from bomb damage in the 1940s and required de-glazing to repair and redecorate the ironwork. The dials consequentially needed to reglaze with hand-blown pot opal glass to match the original.
>
> Internally, the building suffered water ingress from failed and inappropriate 1950s waterproofing, the repair of which required removal of the belfry floor finishes, installing new waterproofing and laying a new limestone floor.
>
> Due to non-breathable paint systems internally, a lack of heating and ventilation and perspiration caused by tour groups climbing the 334 stone steps to the belfry, paint needed replacing to re-instate breathability of the fabric and to reduce humidity within the tower with conservation heating and ventilation.
>
> A redundant ventilation shaft allowed the opportunity to improve access, allowing for the first time the installation of a lift, carefully designed around structural ties within the shaft and enclosed in a new glass structure in the belfry.

Historical and technical research undertaken for the project.

> The team spent two years researching the details of the tower developing the scope of the project, followed by six years on site. The completed project is a series of specialist repair packages, carefully carried out by teams of expert craftspeople.
>
> Surveying and scoping repairs prior to the erection of the scaffold to specify an accurate scope and cost was a key challenge. Surveys had to be completed around public tours and only limited intrusive surveys were possible.
>
> We used a combination of ground level and belfry level surveys to assess the condition of the stonework, plus records of recent repairs carried out on other parts of the estate to establish the scope.
>
> We used drone photography to capture rectified photography of the external envelope of the tower, which enabled a stone-by-stone BIM model to be produced to record data for repairs to each individual stone.

For the cast-iron roof, unique to Parliament, we used knowledge of our previous repairs to other cast iron roofs on the estate.

The most visible change is the restoration of the original 'Prussian Blue' colour scheme to the clock dials. Extensive analysis and research into the original design, including records of previous repairs and the original Charles Barry watercolour allowed for the reinstation of the original colour palette.

After erection of the scaffold, specialist conservators took over a hundred paint samples from the iron dials and surrounding stonework for analysis, building up an extensive report of prior redecorations. Paint was removed, to allow drilling out of pinhole defects and areas of corrosion in the ironwork. The 1950s glass was removed and the iron frame was blasted and repaired before being redecorated in the striking Prussian Blue scheme and re-glazed with new, hand-blown pot opal glass to match the original.

Stages of implementation of the project.

Due to the small footprint but 96m height of the tower, the works were completed in a number of different stages. The first stage was the erection of a 100m high self-supporting scaffold, which was not tied back to the tower to avoid damage to the stonework. This provided access for repairs to the stonework, windows, clock dials and other areas, and also provided hoist access to the belfry and into the building, overcoming access limitations of the internal spiral stair. Construction of the new internal lift (as a priority) also allowed better access for internal works to the building.

The cast-iron roof tiles and ornamentation were removed for off-site refurbishment, as were all parts of the Great Clock, including the clock hands themselves, with one dial always showing the time through use of an electric motor.

Internally, non-breathable paint systems needed to be stripped, allowing for lime plaster repairs. Reinstatement of historic paint colours, using breathable mineral paints, solved condensation issues along with the introduction of humidity-controlled conservation heating.

The works required careful sequencing around available access, which was particularly challenging during COVID-19.

The project was the first Parliamentary project to use BIM Level 2 and NEC contracts, with an emphasis on mutual trust and collaboration. BIM allowed for the coordination of complex design interventions, such as the lifts to be designed around the existing structure in three dimensions and to coordinate installation of new building services. It also provided rich 3D visuals that aided both construction sequencing and planning and interpretation for stakeholders and visitors.

The client provided co-located office spaces, which promoted a strong ethos of teamwork and enabled everyone involved to quickly and collaboratively resolve any issues during design and construction.

Description of the design and conservation work undertaken, including the rationale behind key decisions made during the process.

In addition to weathering, pollution and wartime bomb damage, not all previous works/refurbishments were positive contributions, particularly in material/stone choice. The desire was to restore the moment's resplendence through enduringly high-quality craftsmanship that is easily maintained.

Records kept of previous refurbishment were scarce, and an important objective for our project was to fully document all works using BIM, for the befit of future care of the building. Our approach focused on completing a detailed analysis of each individual stone and tile to understand its structure and condition before developing a digital record for repair and future maintenance.

Clock: All weights, pulleys and hands (plus mechanisms) were removed and refurbished. The clock was disassembled, cleaned and re-lubricated and the automatic winding system (disconnected in 1960s) was re-built. The clock dials were reinstated to their original colour.

Roof: The repair included removing all cast-iron tiles and cover rolls, plus all removable ornamentation. The 3,864 elements were numbered, tagged, and taken offsite for repair or replacement.

Ironwork Gilding: Historic documentation indicated the spire's top-tile was originally gilded, which we fully restored and regilded.

Stonework: Over 700 stonework segments were replaced and those remaining were cleaned with DOFF and poultice cleaning. Stone and indent repairs used Cadeby stone – petrologically similar to the original Anston stone – unlike Clipsham used in the early-mid-20th century repairs. Repairs were captured as BIM data, allowing easy quantification and performance monitoring to inform future repairs.

Windows: All were removed for refurbishment with leaded lights remade using cylinder glass to prevent previously evident water ingress. Blind window openings between the stair and the ventilation shaft were unblocked, reinstating original-matched bronze windows.

Clock dials: To address corrosion, all glass was removed to blast ironwork in-situ, drilling out and rectifying pin-hole defects from their original casting. Dials were blasted using sponge blasting, protecting slender bronze bars. Extensive paint analysis revealed the full history of redecoration schemes, providing vital insight of paint systems to be removed for alignment to Barry's original blue colour scheme.

Internal Plaster: Owing to condensation problems throughout the tower, more breathable paint systems were required. As with exteriors, paint analysis documented different historic schemes before the paint was replaced to match the original colours.

Belfry: The bell-frame was shot-blasted and redecorated, with a new glass structure waterproofing the stair; giving visibility of Big Ben from the top of the internal stair. Asphalt flooring was replaced with original Hopton Wood slabs.

Lift: To aid accessibility, bespoke lifts were inserted in a discussed ventilation shaft stretching from basement to Belfry.

BIM: The first parliamentary project to use BIM Level 2, this innovation enabled extensive quantification of building fabric and roof components; transforming (and easing) the tower's future refurbishment.

Problems encountered and justification for the decisions taken to overcome these problems, both before and during the project.

The fundamental problems before the project that required addressing were water ingress, condensation and the need to repair the clock, stonework repairs and the requirement to refurbish the cast iron roof.

These problems combined justified fully scaffolding the tower to undertake a major refurbishment project with the objective that a comprehensive repair would last for 50 years before the building needed scaffolding again.

Due to the building being occupied before the project started on site, and the 96m height and 12x12m footprint of the tower, a number of assumptions had to be made about the condition of the stonework, with access for surveys only at ground and Belfry level. Likewise, assumptions were made regarding works required to the cast iron roof based upon as-built data from other cast iron roof projects completed at Parliament.

There were a number of challenges on site, particularly additional stone repairs that were identified after close inspection from the scaffold. Additional structural repairs to the cast iron roof, including replacement of decorative shields were also required when they were removed from the building for off-site inspection prior to refurbishment.

Challenges were addressed quickly and efficiently in large part due to colocation of the project team, which enabled face to face optioneering when any discovery of additional repair was made. The cost manager was fully involved in all discussions around the scope, allowing decisions to be made within the overall budget and contingencies and taking into account long term value presented by long-lasting and robust repair.

Description of the building and conservation techniques and principles applied, materials employed and any traditional crafts and skills used.

The conservation of the Elizabeth Tower required a detailed understanding of historic materials, traditional crafts, and modern conservation principles to preserve both aesthetic and structural integrity and to provide a long-lasting repair for the benefit of future generations.

Stonework replacements were made using Cadeby Magnesian limestone, a close match to the original Anston stone. A substantial part of the tower was previously repaired with Clipsham, a different type of limestone, which was left in place.

Surveys, including drone inspections, and BIM modelling used to help define and document the scope of repair, which comprised indent repairs, mortar repairs, pinning, defrassing, and repointing. Carvings were executed off-site using templates of original stones and carefully reinstated to maintain historical accuracy. Gentle cleaning removed soiling and sulphation accumulated since the 1980s.

The cast-iron roof and clock dials underwent systematic conservation. Components were removed off-site for blasting, zinc priming, and application of MIO paint layers, filling pinholes and restoring durability. In-situ elements received mechanical abrasion and layered MIO coating. Non-ferrous decorative features, including clock hands, railings, and finials, were treated similarly, with final finishes restoring original Prussian Blue and gilded details.

Internally, historic plaster and paint were analysed to identify original colour schemes. Non-breathable layers were removed using biodegradable poultices, and lime-based plaster mixes were recreated for main rooms and staircases, incorporating traditional techniques such as horsehair reinforcement. Paints were selected to be breathable and non-toxic, replicating original hues.

Clock dial surrounds were carefully stripped and repainted using mineral silicate KEIM Royalan paint, preserving vapor permeability. Gilding employed 23.25-carat gold in traditional single-application techniques.

Waterproofing the belfry floor was critical for protecting the Clock Mechanism Room and Dial Rooms. Original jack arches were retained, and lime screeds were used to form a tapered floor. Leesons Watertite, a seamless polyurethane system, provided robust waterproofing without altering historic fabric, with Hopton Wood flooring reinstated above.

This project combined meticulous historic analysis, traditional masonry, plastering, gilding, and ironwork skills with modern surveying and modelling techniques. Each intervention respected the original materials, forms, and craftsmanship, ensuring Elizabeth Tower's conservation for future generations while enhancing structural and environmental resilience. In addition, the refurbishment project provided employment for hundreds of craftspeople with specialist skills in stone and iron repair and other traditional building skills, helping to preserve these skills which are vital to the maintenance and repair of historic buildings.

European significance

European significance of the project/initiative/nominee.

Restoration of the Elizabeth Tower embodies conservation values that resonate beyond the UK, strengthening a shared sense of European cultural identity.

As one of the most recognisable landmarks in Europe, the Tower is a symbol not only of British democracy but also of the continent's collective heritage and commitment to peace, stability, and civic life.

Its meticulous conservation demonstrates how cultural heritage can drive international cooperation: specialist craftspeople and materials contributed from across the UK and Europe, ensuring that traditional skills such as stonemasonry, gilding, and clock making continue to thrive. By reinstating the tower's Prussian Blue and gold colour scheme, which synergises European and British patriotism, and extending its lifespan for future generations, the project connects communities to a common history of promoting unity in adversity.

> Its impact is global, but its message is profoundly European: that safeguarding shared heritage fosters trust, understanding, and cohesion across borders.

Results and impact

Summary of the main results achieved and knowledge that has been gained. List the ways that the project/initiative contributes to the preservation and/or enhancement of the historical, cultural, environmental, educational and/or social values of the heritage in question. Mention the project's impact on conservation policy and practice, if any.

> The project achieved its key aim of preserving a cultural monument of global significance for future generations, following conservation best practice, intertwining new technologies and ancient crafts.
>
> All facets of the project have been designed to last for 50 years or more.
>
> Over 1,000 stonework repairs were undertaken to the body of the tower, addressing key life-safety concerns. The entire cast-iron roof was stripped to its frame, with each piece analysed and either repaired or replaced. Layers of lead paint were stripped externally and internally, improving the breathability of the substrates. Essential repairs were undertaken to the internal plasterwork, uncovering the original plasterwork unseen since the building's completion. The entirely of the clock mechanism and hands were dismantled and refurbished. The cast iron clock dials were stripped back, repaired, and reglazed with a new pot opal glass. And, the insertion of two lifts and M&E services, improve both the building's accessibility and energy efficiency.
>
> All of these aspects of the project helped to gain a 21st century understanding of the Tower, a building with such constraints that thorough surveys can only be undertaken at lengthy intervals. The BIM model provides an essential tool for managing the maintenance of the building until the next repair cycle.
>
> But fundamentally the project also helped preserve techniques - at scale - which are essential to building conservation. As a result of this investment in heritage skills – from stonemasonry and gilding to glass cutting and horology – these crafts will endure alongside the fabric they have helped to conserve.
>
> The project was recently shortlisted for the RIBA Stirling Prize, the first ever conservation project to be shortlisted - a historic first. It signals a shift we hope defines the future of architecture, with reuse and restoration at its core.

Aspects of the project that can be considered innovative within its area or field.

> Innovation was central to the Elizabeth Tower's restoration. Surveying and scoping repairs before scaffolding was erected posed a major challenge, as only limited intrusive surveys were possible. The team combined ground- and belfry-level inspections with estate repair records to establish scope and cost, while drone photography captured rectified imagery of the tower's envelope. This enabled the creation of a stone-by-stone BIM Level 2 model, recording data for each individual repair and supporting accurate cost measurement.
>
> Knowledge from previous cast iron roof projects informed re-measurable rates for Parliament's unique roof, allowing over 80% of original ironwork to be retained. Paint analysis reinstated the historic Prussian blue clockface scheme.
>
> Access issues were solved with a bespoke passenger lift fitted into a disused ventilation shaft, supplemented by a platform lift to the belfry. Discreet MEP services, conservation heating, and humidity-monitored natural ventilation further demonstrate how innovative solutions safeguarded heritage whi1le delivering 21st-century performance.

Steps taken to reach people who have not previously interacted with the site/project. This might include youth, local communities, non-traditional audiences, people with disabilities, etc.

> The Elizabeth Tower is a focal point for visitors to Parliament Square, attracting thousands daily from the UK and abroad. Its refurbishment has been met with overwhelming public approval, reflected in more than 30,000 positive TripAdvisor reviews praising the restoration, the tower's iconic presence, and the expertise of tour guides.

The project supported hundreds of skilled craftspeople in traditional trades such as stonemasonry and ironwork, helping sustain heritage skills vital to historic building conservation.

Visitor access has been transformed: a new online ticketing system replaces the old waiting-list approach, making tours more open and equitable. Improved lighting and new “pause space” exhibition rooms have doubled visitor capacity, with 30,000 expected next year compared to 12,000 in 2016.

For those unable to attend in person, a virtual tour provides unique access to internal spaces and external details. Engagement events, including Open House, further connect communities with the Tower’s history and conservation.

Project’s interaction with the surrounding community and landscape.

Throughout the project a wide variety of public events were held to provide details about the project as it progressed. This included talks given by the project team, Clock Mechanics and tour guides, with photographs of the works taking place to explain the conservation and refurbishment processes being undertaken. The client media team regularly documented the works, through progress photos and in-house and third party social media, including a documentary filmed documenting the works undertaken.

Events were held celebrating the contribution made to the project from across the UK, with supply of Cast Iron and stone from Yorkshire and Scotland, and clock making in Cumbria, with craftspeople working on the project from across the UK.

Community groups have been able to engage through the client’s social media accounts and have offered a huge amount of support and positive comments. The project was supported by Westminster City Council and Historic England.

Environmental, social, and economic sustainability of the project (e.g. contribution to climate action and environmental protection; measures to ensure long-term financial sustainability or future viability; benefits for people and communities, where relevant).

John Ruskin famously said “When we build, let us think that we build forever”. This as relevant today as it was in the 1840s, particularly in view or the current climate emergency. This statement very much guided our approach.

The project was repaired with outstanding craftsmanship using original materials, including carefully matched natural stone. Stone is inherently more sustainable and has lower embodied carbon than manufactured building materials, and carving of new stonework supports traditional building skills.

The top 1/3 of the tower is constructed of cast iron, a high-embodied carbon material, but a very long lasting one. The cast iron roof was conserved with over 80% of its 160-year-old elements retained, reflecting the material’s exceptional longevity and lower lifetime embodied carbon compared with modern alternatives.

A full overhaul of building services reduced energy consumption. 1980s electric lighting was replaced with energy-efficient LEDs to illuminate the clock dials and Ayrton Light. Floodlighting was reduced, with retained fittings upgraded to low-energy LEDs. The Tower now runs on 100% electricity, with metered supplies for electricity and water, as part of Parliament’s transition to net zero.

For the first time, conservation heating has been introduced using low-temperature radiant panels, fed by an electric boiler, replacing gas. This is humidity activated, preventing internal condensation, which protects the building fabric and improves air quality. Overheating is controlled through stack-effect natural ventilation. The tower’s thermal mass further stabilises conditions, crucial for the Great Clock’s accuracy.

Rainwater disposal has been modernised with improved waterproofing, replacement limestone finishes, and additional maintenance points. Original cast iron pipes were repaired and redecorated. Domestic hot water is supplied by electric point-of-use heaters, while an electric boiler powers the new fabric-protection heating. With renewable electricity, the tower will achieve Net Zero Carbon in Operation by 2035.

> Best-practice conservation guided all work. Historic fabric was repaired rather than replaced, and natural, low-carbon materials were prioritised. The tower's limestone was sourced from Cadeby quarry in Yorkshire, near the original Anston site. Hand-carved stone matched Victorian detailing, with eroded stones re-dressed and reused where possible. Lime mortars were used for all bedding and pointing, offering a more sustainable solution and helping control condensation through reinstatement of breathable finishes.
>
> The restoration ensures the tower will not need major repairs for around 50 years. At more than 160 years old, the Elizabeth Tower is a model of conservation-led renewal: preserving heritage while embracing sustainability and innovation.

Measures adopted to ensure the longer term maintenance of the site.

> A key deliverable for the project was making maintenance access easier, with particular reference to preventing water ingress. The tower has a single but very high capacity cast iron rainwater pipe, which was repaired and redecorated. Beneath Belfry level, the vertical pipe splits to four branches, which we also repaired and added maintenance covers for easy cleaning. Additional access points were added for maintenance of the upper iron roofs from the inside of the building. As the gutters are enclosed, this eliminates risk of maintenance.
>
> We installed a checkline and harness system for maintenance of the floodlighting on the balcony at Belfry level above the clock dials.
>
> Windows are generally locked, but can be opened for cleaning and maintenance.
>
> The repair of the stonework and iron roofs is designed not to require further repair until the tower is next scaffolded in around 50 years (previously the tower required repair every 30 years). We paid particular attention to long-term repair of stone string courses and hood mouldings to ensure that rainwater is deflected from the façade.
>
> The only part of the tower that requires specialist maintenance is the clock dials, which are cleaned every five years by a rope access team.

Dissemination of the project's results and knowledge gained and any outreach or educational activities.

> Repairs were undertaken by skilled craftspeople from across the UK. Traditional building skills, particularly fine stone carving and iron refurbishment are declining, with a considerable skill set being lost as experienced craftspeople retire. Key aims of the project were to document the repair works, and for experienced craftspeople to pass their knowledge of how to conserve and repair historic buildings onto the next generation. The project encouraged apprenticeships and learning opportunities for contractors and consultants alike. At Purcell, two Architectural students gained their chartership during the project, and others gained accreditation in building conservation.
>
> A TV documentary was commissioned to convey the story of the repairs and progress of the project. We have presented the project through a number of lectures internationally, demonstrating how the building fabric and the clock in particular were refurbished, and also sharing details of the technology used to help deliver the project.

Transferability of the initiative to other contexts and its scalability potential.

> The key objective of using BIM was to document all of the repair works undertaken, capturing quantities and type of repair for use to inform the scope and re-measurable cost for other projects to be undertaken at Parliament. This has been used directly to help plan to scope and the budget of repairs to be undertaken to the other 100m tall tower at Parliament, Victoria Tower.
>
> We were able to document the stone repairs by making a stone-by-stone BIM model and attaching data to each stone or indent repair, including stone typology, depth, details of any pinning etc. Several thousand repairs were undertaken.
>
> We also documented the repairs to all the cast iron tiles, cover rolls, and ornamentation that make up the roof. We used an online database to track each component through 7 stages of refurbishment from being removed from the roof to being reinstated.

Costs of the project/initiative

Costs of the project (in euro), financial and management arrangements, funding partners and/or the type of funding.

> The project cost, £60m, was funded by UK Parliament.
>
> The project used NEC3 contracts, and was administered by a Project Manager with continued cost management of any change overseen by the Quantity Surveyor/Cost Manager.
>
> The co-located design team when the project was on site offered significant benefits to the client, with any element of change required quickly optioneered and balanced between long standing repair and valve for money.
>
> The cost manager played a crucial part in prioritising works in collaboration with he Architect, engineers, Project Manager and Client.

Funding provided by the European Union or the EEA/Norway Grants (including programme, year and amount of the Grant), if any.

> n/a

Additional information

How would winning the European Heritage Award / Europa Nostra Award benefit you, your project and/or your organisation?

> Winning the European Heritage Award / Europa Nostra Award would celebrate the exceptional craftsmanship, innovation, and collaboration that safeguarded the Elizabeth Tower for future generations. It would highlight conservation as central to sustainability, raise awareness of heritage skills, and inspire investment in restoration across Europe. For our organisation, it would affirm our commitment to best-practice conservation, strengthening partnerships, and ensuring that shared cultural heritage continues to unite communities across borders.

In case this submission is the winner of the Grand Prix, what will the monetary award be used for?

> If awarded the Grand Prix, the monetary award would be dedicated to supporting education and training in traditional heritage skills, such as stonemasonry, gilding, glass cutting, and horology. These crafts were central to the Elizabeth Tower's restoration, and continued investment is vital to ensure their survival for future generations.

In case this submission is the winner of the Grand Prix, who will be the recipient of the monetary award?

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How did you find out about the European Heritage Awards / Europa Nostra Awards?	Word of mouth
Is this the first time that this entry has been submitted to the European Heritage Awards / Europa Nostra Awards?	Yes

On a scale of 1-10, how satisfied are you with this online submission form?	✓ 5
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1_Clock faces d... 3.7 MiB



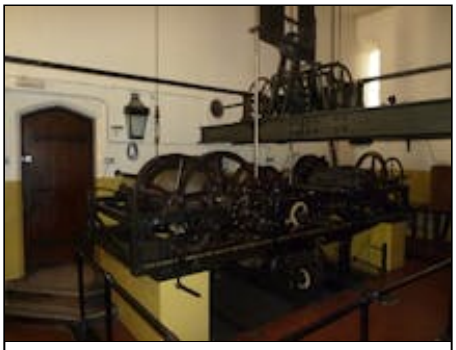
Belfry BEFORE ... 1.1 MiB



Belfry BEFORE ... 1.5 MiB



Belfry BEFORE.J... 2.9 MiB



Clock mechanis... 2.7 MiB



Clockface BEFO... 9.8 MiB



Inside Clockfac... 2.1 MiB



Stair BEFORE.JPG 2.4 MiB



1_Craftsperson ... 175 KiB



1_During restor... 341 KiB



1_Restoring the... 2.7 MiB



1_Stonework.p... 472 KiB



1_The Belfry.png 724 KiB



1_Tower in scaff... 1.3 MiB



2_Tower in scaff... 626 KiB



3_Tower in scaff... 154 KiB



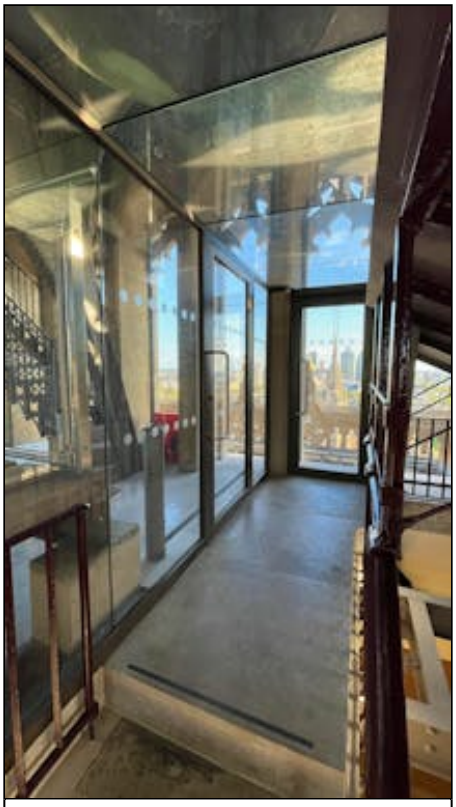
Belfry AFTER 1.j... 218 KiB



Belfry AFTER 2.j... 3.1 MiB



Belfry AFTER 3.j... 3.8 MiB



Belfry AFTER 4.j... 3.8 MiB



Belfry AFTER 5.j... 193 KiB



Clock Mechanis... 2.6 MiB



Stair AFTER.jpg 3.7 MiB



1_Elizabeth Tow... 2.9 MiB



2_Elizabeth Tow... 2.8 MiB



3_Elizabeth Tow... 2.8 MiB



Inside Clockfac... 2.9 MiB



54042276248_9... 138 KiB



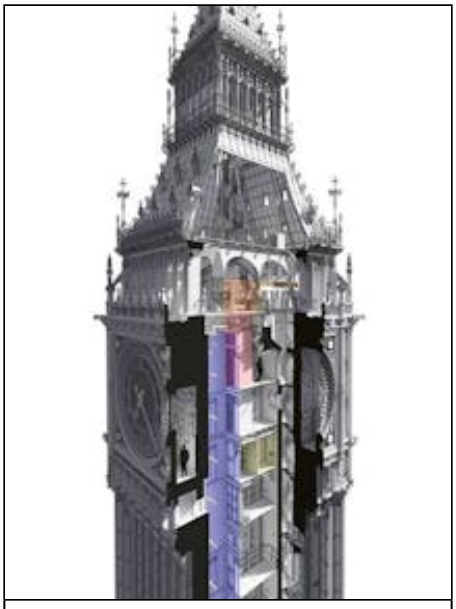
bell (2).jpg 2.9 MiB

DOCX

ALL IMAGES CO... 22 KiB

PDF

Plans as Existin... 1.2 MiB



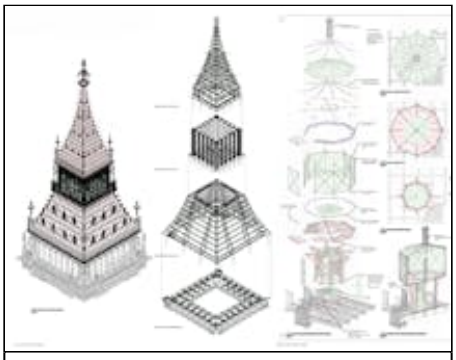
BIM.jpg 33 KiB

PDF

Site Plan.pdf 534 KiB

PDF

Sections as Exis... 596 KiB



Screenshot 202... 615 KiB

DOCX

HA2026 Entrant... 113 KiB

PDF

HA2026 Entrant... 189 KiB



Attachment name

https://www.youtube.co...



Attachment name

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