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Photo: Philip Vile

New lease of life for the Lane

Rob Halliday uncovers the two-year refurbishment of the historic Theatre Royal Drury Lane, now restored for a new era of theatre-making . . .

It used to be that if you didn't enjoy your theatre, you could just go ahead and do something about it either by choice, or, often, after it was destroyed by fire. Take London's Theatre Royal Drury Lane: the building is effectively the third on the site, the auditorium the fifth, after the previous buildings were destroyed by fire (1672), demolished (1791), destroyed by fire (1809), and then within that building, the auditorium was reconstructed (1900) then reconstructed again to the form we have been familiar with for almost a century (1922).

Do the maths and you get an average life of 50 years for each theatre across that time frame. You could argue we're long overdue for a new Drury Lane. But things are harder now: we use electricity instead of candles or gas and have better fire control measures. We also value the old, fight to conserve it, even list it to legally preserve it.

The current Theatre Royal Drury Lane is Grade I-listed in recognition of both its cultural heritage - its site has the longest history of continuous theatre use in the country, its right to present dramatic entertainment dating from a Royal Patent granted in 1662 - and its architectural significance. The current building, occupying a whole city block, contains remnants and fragments of the earlier ones, including, if you look hard enough, elements of the previous auditoria, as well as support services such as props stores and a working paint frame, evidence of a time when the services that supported theatre production could afford to be local, or even part of, the theatre itself. Theatres tend not to self-destruct anymore (though those in the hands of uncaring owners do just keep slowly decaying), and you have to work much harder to persuade people to let you make changes to them.

But over the last two years, changes have been happening to Drury Lane. Its present owner, Andrew Lloyd Webber, is a custodian who does very much care about the building - but who has never been quite happy with it. He's loved the enormous foyer spaces but felt that their original designs, by Benjamin Dean Wyatt, had been disturbed by changes and incursions over the years. He's appreciated the vast auditorium, the biggest in the West End, but has felt it's never quite clicked. He's recalled the explanation given to him by the denizen of variety producers, Robert Nesbitt, about 50% audiences in different theatres of similar capacity: "Remember, my boy, that the London Palladium is half full, the Theatre Royal Drury Lane is half empty."

He could just have lived with it - after all, the theatre has had a reasonably successful life with many hit shows and some really long runs, notably the 10-year residence of the original *Miss Saigon*. Instead, as a theatre lover and an architectural

historian, he's committed time and effort to trying to figure out the issues, and then trying to fix them.

Time, effort and, yes, money - £60m officially. But these things are always a little higher, unofficially. A pretty serious commitment, and one he stood by even during the 18 months when none of his other theatres or shows were earning any income. That's the advantage of theatres being owned by those who love theatre, rather than by money-men who have altogether different measures for value and return on investment . . .

That said, his LW Theatres company is a commercial operation, receiving no public funding for Drury Lane even given its historical importance. The theatre couldn't just be made more beautiful - it also had to be made more efficient, particularly in the process of getting shows on. That, too, became part of the drive behind the project.

PAST TO FUTURE

To help figure out the issues and how to resolve them, Lloyd Webber turned to the current doyen of theatre architects, Steve Tompkins of Haworth Tompkins. The track record of Tompkins and his team in this field is remarkable now: spectacular refurbishments such as London's Royal Court, new builds to replace existing theatres such as at Liverpool's Everyman, refurbishments and updates to more modern historic buildings such as the National Theatre, innovative approaches to constructing new theatres such as the pre-fabricated Bridge (see *LSi January 2018*), and even entirely new theatres now in planning beyond the UK. Tompkins was thrilled to be brought on board, if very aware of the challenges. "I reckon the foyers are probably the most beautiful series of Georgian public spaces in the country, maybe anywhere," he notes. "We had to honour the history and their importance to the theatre, but also return them to their full glory. They had become silted up over the years, and the building wasn't really open to the public, except just before and after a show. You certainly wouldn't think, 'oh I'm in Covent Garden I'll just nip in to Drury Lane for a cup of tea', like you would with the National Gallery Cafe or the National Portrait gallery. So it became about making the building more part of the everyday life of the city."

In the auditorium, "Andrew wanted it to be a more effective tool for making theatre - for artists to feel the same kind of electricity they do in theatres like the Palladium. The current auditorium kind of broke the mould from the Georgian and pre-Georgian theatres; it became much more cinematic in its form, as was the fashion around the 1920s when it was built. But it was never that well-received, and Andrew was, quite courageously, asking the question, could this big, baggy, decorated barn of a space



Photos: Andy Paradise

← The auxiliary spaces, from top: The Garden is the venue's new open-all-day restaurant and bar

The Rotunda has been transformed into a working space within the foyers, rather than just a route between auditorium and bars

The Grand Saloon now has the feeling of being in a fine hotel, and is now open during the day as well as for performances



be turned into something which has real intensity, real intent. None of us, if I'm honest, knew the answer when we started on the project, but that was the brief."

And then there was the engine room of any theatre, the stage: enormous, but increasingly impractical for modern shows, with a grid and flying system not capable of taking modern loads, a rake that many shows didn't want, a fragile stage floor and a basement full of fascinating but archaic stage equipment. "It was the most beautiful and evocative museum of stage machinery - right where the technology and 21st century working parts of the building that make it viable and attractive to those producing shows should have been," Tompkins recalls. "That was a massive dilemma, and probably the most delicate question we had to face, because everywhere else in the building it was possible to honour its history whilst at the same time make it more effective and viable."

Faced with all of that, Haworth Tompkins started by documenting the history, researching and writing a Conservation Management Plan that included contributions from others, including Historic England and theatre historians John Earl and Dave Wilmore. The document's introduction from Lord Lloyd Webber makes clear his intention to honour the building whilst making it a more practical space for modern needs. From that, according to Steve Tompkins, "we were able to build a kind of enthusiastic consensus between the many players - the conservation officer, Historic England, The Twentieth Century Society, the Georgian Society - to allow the building to move forward into another reincarnation."

RECONSTRUCTION

After five years of studying, thinking and designing, work finally started after the closure of 42nd Street in January 2019. Actually, one little extra show was snuck in: an open-invite showing of that original stage machinery in action, restored to working order for the event to allow it to be precisely documented (see *Classic Gear, LSi February 2019*) before being removed from the building for the last time, special permission having been won for this from English Heritage, with examples of the machinery now placed in the care of Unusual Rigging. But then work began in earnest, under the guiding hand of project director Dan Watkins, project managers Avison Young, construction managers GTCM, theatre and acoustic consultants Charcoalblue, Unusual Rigging for all of the upper areas of the stage house, and LW Theatres' technical director David Draude and technical client representative Matt Wright guiding a huge team of specialist contractors from the general building, heritage building and entertainment worlds.

It was quite an undertaking, even before coronavirus hit. It's a big, challenging site, filled with complications; £60m is a lot of money, but Dan Watkins points out that it's not actually all that much

more per square metre than his previous project, the updating of the Chichester Festival Theatre. There are just many more square metres - 6,700 of them. "Drury Lane is a city block in itself," Watkins notes, "so our budget had to stretch a long way. There were many difficult decisions to be made about where the money should be spent to fulfil the many aspirations and the building's essential needs."

We were lucky enough to be able to visit several times, once in mid-2020 about two-thirds of the way through the re-scheduled project, again just under a year later as the project was nearing completion and the load-in for the musical *Frozen* was underway, and finally, on the gala opening on 22 July when VIPs enjoyed guided tours whilst the *Frozen* team tried to tech their show to the background, a hubbub of delighted conversation and a string quartet in the foyer.

It's quite remarkable what's happened during that time . . .

FOYERS & EXTERIOR

The foyers and exterior are probably a bit beyond the scope of LSi, but it'd be a shame to ignore them. Compared to most other West End theatres, the sheer amount of space in the foyers at Drury

Lane has always been remarkable. That hasn't changed. What has is that they've been de-cluttered, opened up, made more sensible, to make a building that is more welcoming and inviting to the public; Tompkins calls it a "sort of deep tissue massage" on the building. "Before we started, we'd hang out, particularly in the intervals. It was interesting because the action was in the basement and in the Grand Saloon. And the staircases and Rotunda, which were at the time painted a quite cold green, just felt chilly and were literally empty. And you thought, this a beautiful public space but there's nothing going on here. So we knew we needed to bring the bars and the people into these spaces. The staircases are big enough to be rooms themselves."

The two side staircases that wind up to the remarkable central dome had been boxed in over the years to provide storage space. That's now all been stripped out so the staircases float again, the spaces beneath housing seats and sofas, places for audience members to sit down for casual conversation before the show or in the interval. Throughout the foyers, the feel now isn't that of a typical theatre: it's of a sumptuous grand hotel or an art gallery, particularly with the many artworks on display, some from the

"The building wasn't really open to the public except just before and after a show. So it became about making the building more part of the everyday life of the city . . ."

- Steve Tompkins

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Theatre Royal, Drury Lane

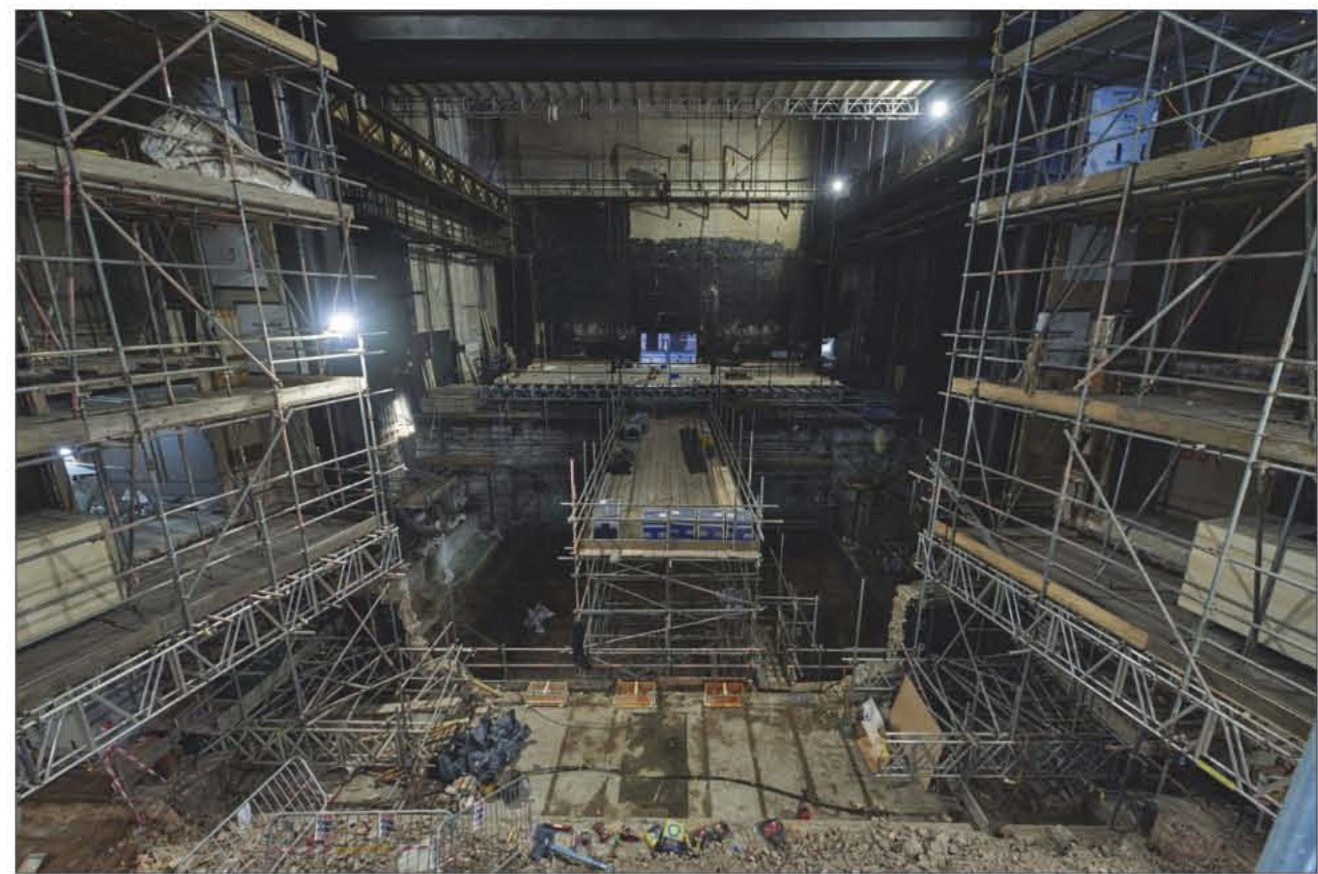
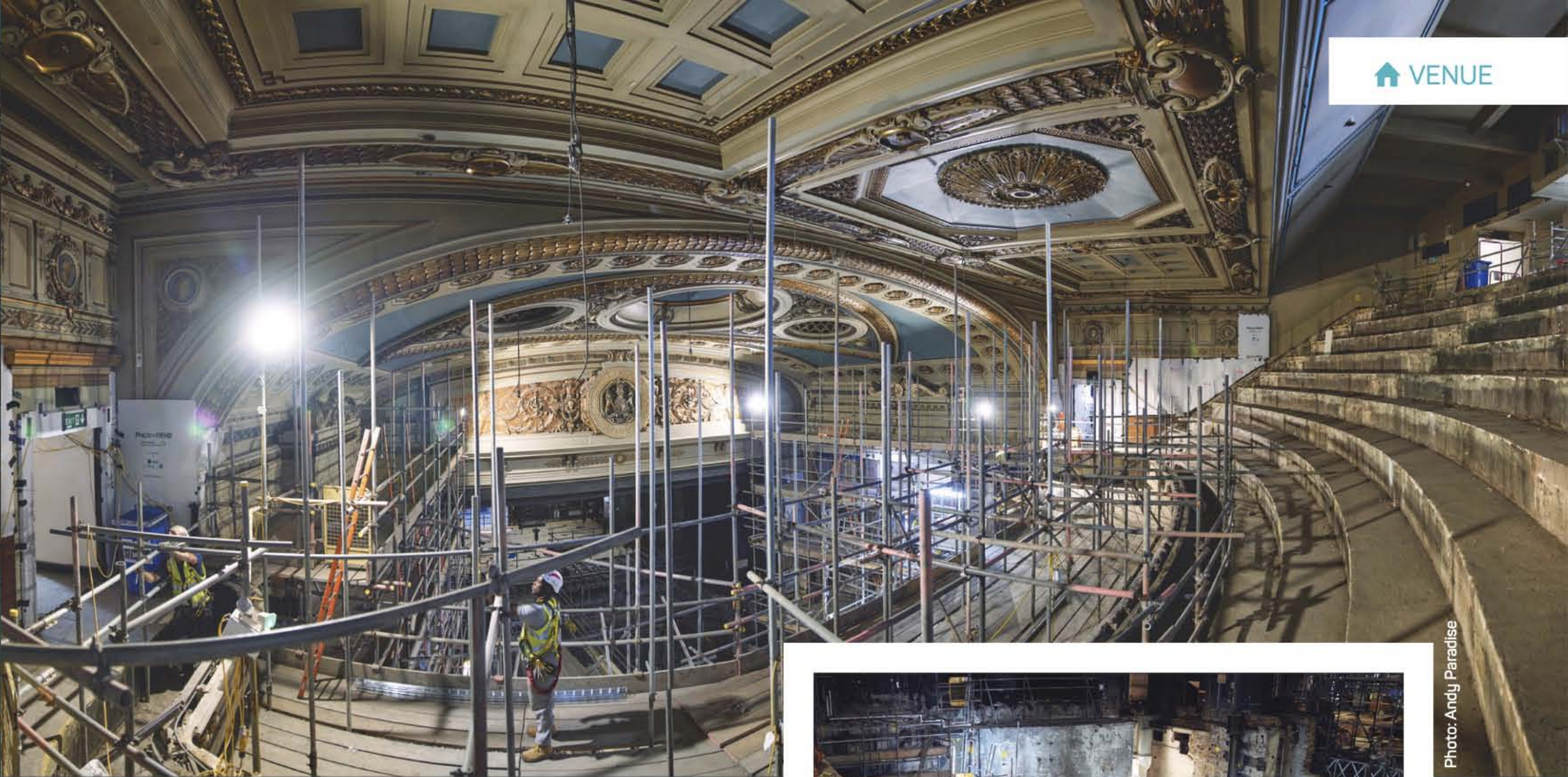
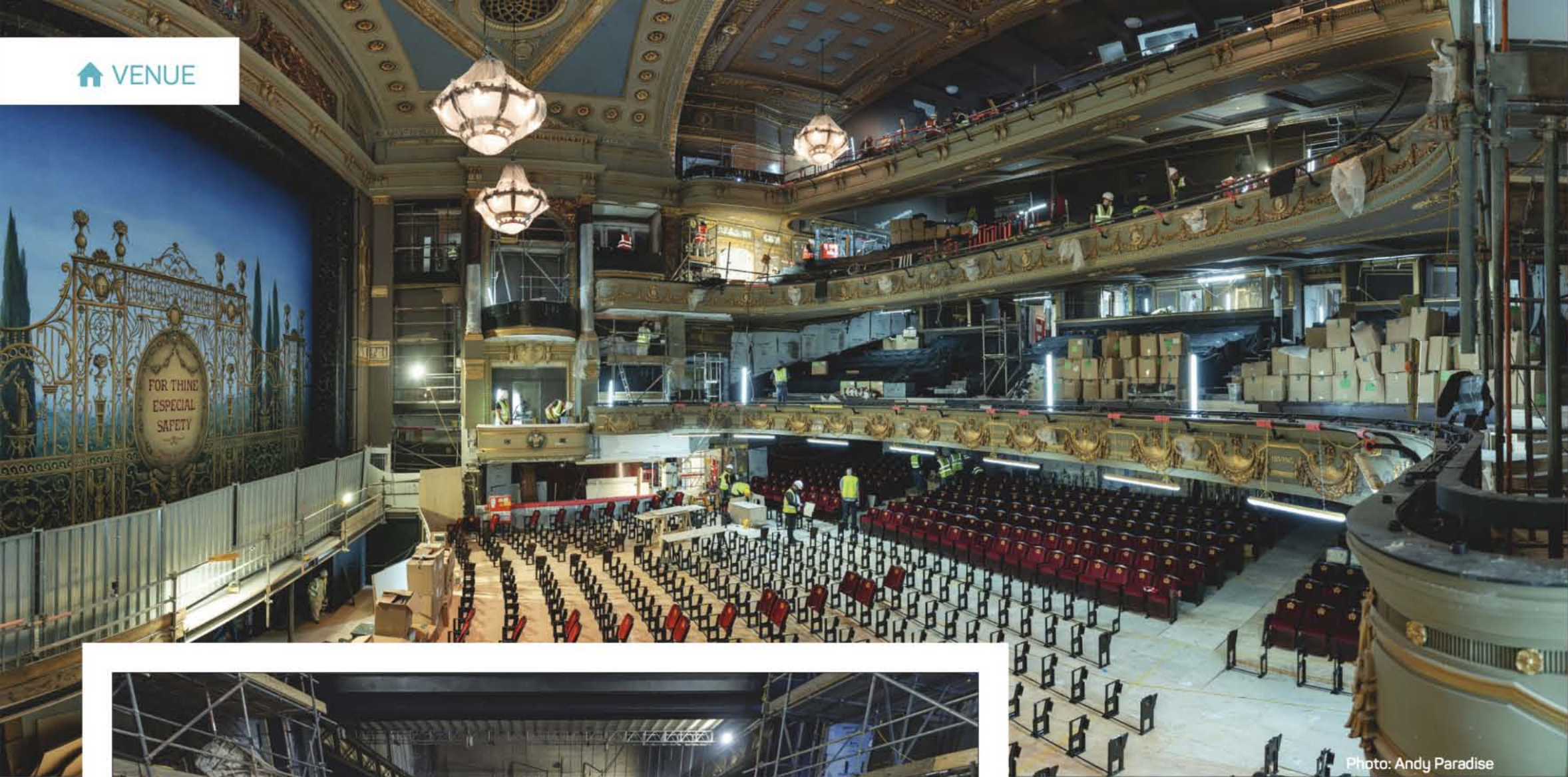


Photo: Andy Paradise



Photo: Philip Vile



Photo: Andy Paradise



Photo: Andy Paradise



building, one directly out onto the street, the other into a new bar-restaurant area that has taken over Vinegar Yard, which used to be a street and service area to one side of the building but is now a very elegant, welcoming public space, to be visited for its own sake but also providing access into the theatre, including to the new lift that provides step-free access to every level. Circulation has also been improved throughout, removing the segregation between levels that used to exist and, in particular, replacing the strange and tortuous route to the stalls seating (which used to involve going down some stairs, through some narrow corridors, back up some stairs and into the side of the stalls) with direct walk-in access. The lower levels are now elegant new toilets, particularly ladies toilets - getting more of these into the building has been something of a personal mission of Madeleine Lloyd Webber.

Outside, the building has a new hue, cream replacing the former white, and an elegant new exterior terrace above the front portico; this has been made possible by removing the old show hoarding that occupied this space and replacing it with a video screen on the neighbouring building, which Lloyd Webber's Really Useful Group production company acquired for office space - this in many ways just a continuation of the theatre's expansion across neighbouring sites over its history.

AUDITORIUM

The auditorium does fall within our remit: it's where we work, where our lights and speakers go, and of course, where our audience watch our creation from. Stepping in to the 'new' Drury Lane auditorium is fascinating because it is not, at a quick glance, all that different from the 'old' Drury Lane auditorium. There has been no attempt to throw it

out and replace it with something entirely modern, no attempt to step back to a version of the pre-1922 horseshoe-shaped, five-level auditorium. Rather, it's what was there, four levels: refined and improved - but relatively subtly. If you were only an occasional visitor to the theatre, or familiar with it only through photographs, you might wonder what has actually changed, other than a good buff-and-polish.

But actually, a lot has. In particular, where it used to be very rectangular and sharp-edged, it has become softer, curvier, gentler. The balcony fronts now wrap around at the edges, then smooch into the box positions rather than being separate from them. All involved talk of the desire to have the audience hug or embrace the stage, rather than just staring straight at it. "One key move was to round off all the tier fronts," Steve Tompkins explains. "So you lose that sort of 'sitting back and waiting for the actors to impress you' quality, and it becomes more like an embrace, the energy flowing much more easily even in a house that size." All this was VR-modelled by Charcoalblue to allow everyone to explore it before it was built. Both Haworth Tompkins and Charcoalblue have also considered far more than just the standard proscenium layout, with thought given to possible thrust or even in-the-round configurations whether for shows or special events; the curved corners of the circle front are removable, to allow, for example, staircases to be installed down to the stalls and for alternative stage configurations, if required. Even elements which look unchanged, often aren't quite as they seem: impressions taken of historic plaster details have allowed them to be recreated where necessary, particularly in those new curved corners. The balcony fronts also include practical details for today's technology: demountable rigging bars, and then cunning top cushions, angled to prevent audience members resting their drinks on them, but then hinging open to reveal TrueCon and AV outlets and concealed cable ways beneath.

The second key change involved the side boxes. "We felt that what was really stopping that relationship between stage and audience was the size and prominence of the three layers of side boxes," says Tompkins. "They were like electrical insulators between the stage and the mass of the audience." These boxes have been considerably re-thought; those closest to the stage have been removed to create a black void for technical equipment or scenery (with 'fake' box fronts that can be installed in this space if desired, perhaps as a background for TV shoots), and the others have been re-proportioned, particularly the centre box that used to sit in isolation at an awkward height. "As well as bringing

theatre's collection, some from Lloyd Webber's personal collection, some newly-commissioned specifically for here. This is all the result of a collaboration between Andrew Lloyd Webber and his wife Madeleine, Haworth Tompkins and the interior designers Alexander Waterworth Interiors, together with Simon Thurley, ex-head of English Heritage and a personal friend of the Lloyd Webbers who was chair of the project's steering group and advised on matters across the project.

Helping the opulent, elegant feel is the lighting, designed by a BDP team lead by Colin Ball and Jonathan Redden, which carefully highlights the details of the building and the artwork. All of this lighting is run from its own dimmer/control rooms in the FOH areas, these housing ETC ArcSystem LED drivers tied back in to a building-wide ETC Paradigm control system. The technical design work and commissioning for this was carried out by entertainment specialist PTB.

Very practical changes that have been made include new entrances (or more accurately, re-creations of very old, long-lost entrances) to the sides of the

From top: The auditorium's four levels have been retained, with alterations to rake and seating layout

Side boxes have been re-proportioned and re-arranged, with the Royal Box lowered and a new technical void created between boxes and proscenium

Stages of construction: substage and in the auditorium



the room in towards the stage, we were pulling the centre of gravity down towards the stage level, and moving the royal box down was part of that."

Throughout the auditoria, there are then a myriad of other detailed changes. The wall at the rear of the stalls has been moved forward, for example. "That reduced the capacity, but massively increased the upwards sightline, which was probably the worst thing about the old auditorium," Tompkins notes. "It wasn't even a letterbox - it was like you were looking under a crack in the door." Changes like this means capacity is now down to about 1,900 from around 2,100, but they're all better seats. This rear stalls area also now houses new stage management and lighting control rooms, plus a new mix position.

Across the theatre, every level has had alterations to its rake and seating layout, this involving over 130 different types of seat, all supplied by Kirwin & Simpson, some of these entirely new designs to cope with particular challenges in the auditorium. "In the Balcony, for example, we couldn't knock out the existing rake structure," Charcoalblue's Ollie Wade notes, "so we designed some seats with lower stanchions and spring mounting rather than counterweights, so the actual seat sits on the old structure's plinth then your legs come down in front of that; that was a whole new design for Kirwin & Simpson." Other varieties include different arms, removable seats, demountable seats, alternative crests, and more. All are dressed in a deep red fabric, many embossed with crowns or Royal feathers to reflect the building's royal status.

Technical provision, particularly for delay and surround speakers, has been improved with bars and cabling or cable routes in place. "There's a 38mm pipe around all of the auditorium levels for surround speakers," Charcoalblue's Paul Halter notes, "and really well-concealed Unistrut everywhere." Ollie Wade adds that "we also tried to make sure there were sensible cable routes from anywhere to anywhere, so there are around 150 different cable pass routes around the building - even though that meant our acoustics team, led by Luca Dellatorre and I, were often working against each other - I was trying to make holes to put cables through and he was trying to fill holes to keep everything airtight!"

Much of this effort is about reducing the chance of causing damage to the building's delicate fibrous plaster ceilings from gaining access to run cables. "Throughout, our aim has been to make sure it was possible to hang things and plug them in or get cable to them easily, and particularly without having to go through voids with fibrous plaster," explains Draude. Of course, while that will help preserve the building, there's also the practical aim of getting shows open quicker. "If a show isn't playing, neither it or the theatre are earning money. The sooner we can get a show on, the sooner we can all have an income again." Modern health and safety also plays its part, with Harken tracks concealed close to the front of each balcony to allow safe access when rigging or focusing the balcony front bars.

Overhead, considered truss rigging points remain in the ceiling, though all now have colour-matched bungs available to fill the holes when they're not in use. The mid-auditorium crawl truss isn't there now, though there is still provision for it if it's required in future. The followspot position at the back of the top level is largely unchanged, though the old central divider in the glass window has been removed and the frame size has been reduced to give a clearer shot.

As with the foyers, everything feels fresh, clean, alive and elegant, particularly with the rich red of the new seats and the auditorium's elegant new colour scheme. This is all helped again by BDP's lighting, including the original light fittings which have been updated with polycarbonate replacing glass (so the old



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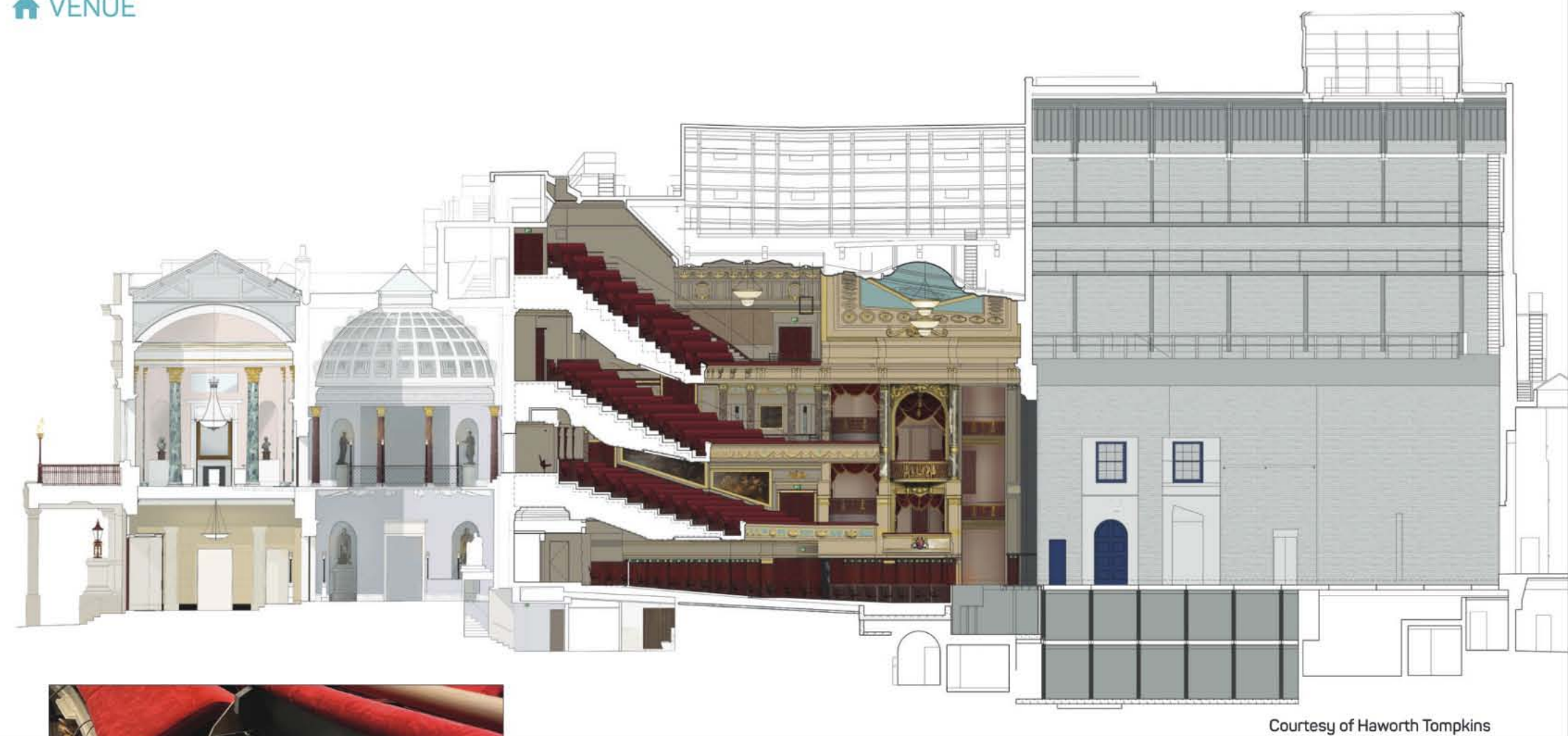
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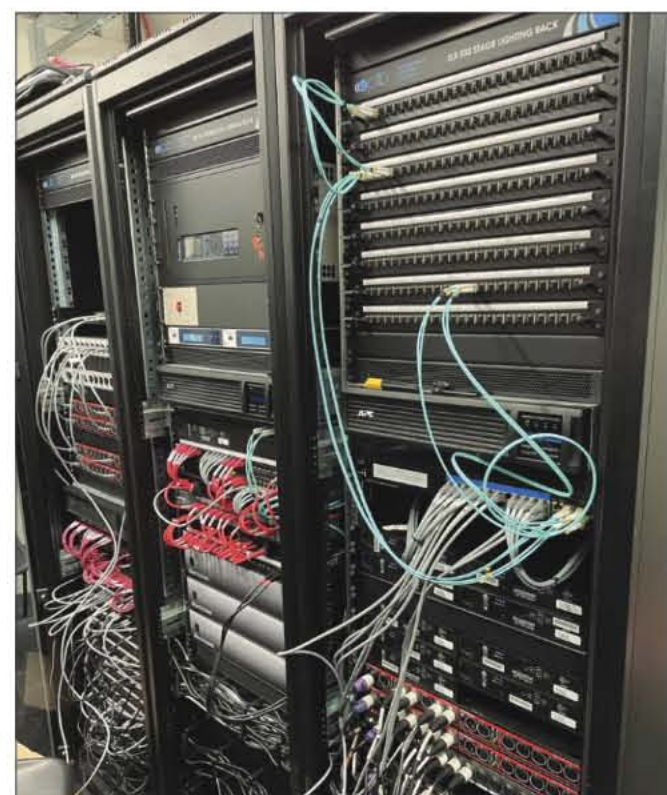


Courtesy of Haworth Tompkins



safety netting can go) and LED sources replacing tungsten, including a new ring of downlighters added to each fitting.

Between stage and auditorium is a large orchestra pit - bigger than before "because in taking the theatre apart, we discovered that the pit wall didn't actually line up with the safety curtain as it should have," Draude explains. "Moving that back to the right place means even more room for even the most socially distanced of musicians!"



From top: Haworth Tompkins' section through the building, showing the Grand Saloon, Rotunda, auditorium and stage house

Concealed power outlets and cable routes below the balcony front arm-rests

Lighting data infrastructure within the newly-created dimmer room

Charcoalblue was also involved with acoustic work, to ensure that the sound of those musicians and the performers would be clearly audible - though interestingly, that was largely a matter of ensuring what was there didn't get messed up rather than making changes to deal with a hundred years of improving sound technology since the previous auditorium was built. "At least from a reverberation point of view, what was there was fine before even assuming that the room is working in amplified mode all of the time, about a second of reverberation," Charcoalblue's Luca Dellatorre notes. "So we didn't really add any additional sound absorbing finish, but we had to make sure that the new seat upholstery and new carpets would provide a similar absorption to what was there before. But the most challenging part was the invisible part - the integration with services, and the challenge of navigating all of those ducts into an existing listed building." He is particularly pleased with the new control room windows, though, where "in order to maximise the opening we didn't go for something that moves horizontally, but that goes down and is stored in the lower part of the wall. It's not something off-the-shelf, but it has worked very well, to be sure the technicians working in there aren't heard in the auditorium."

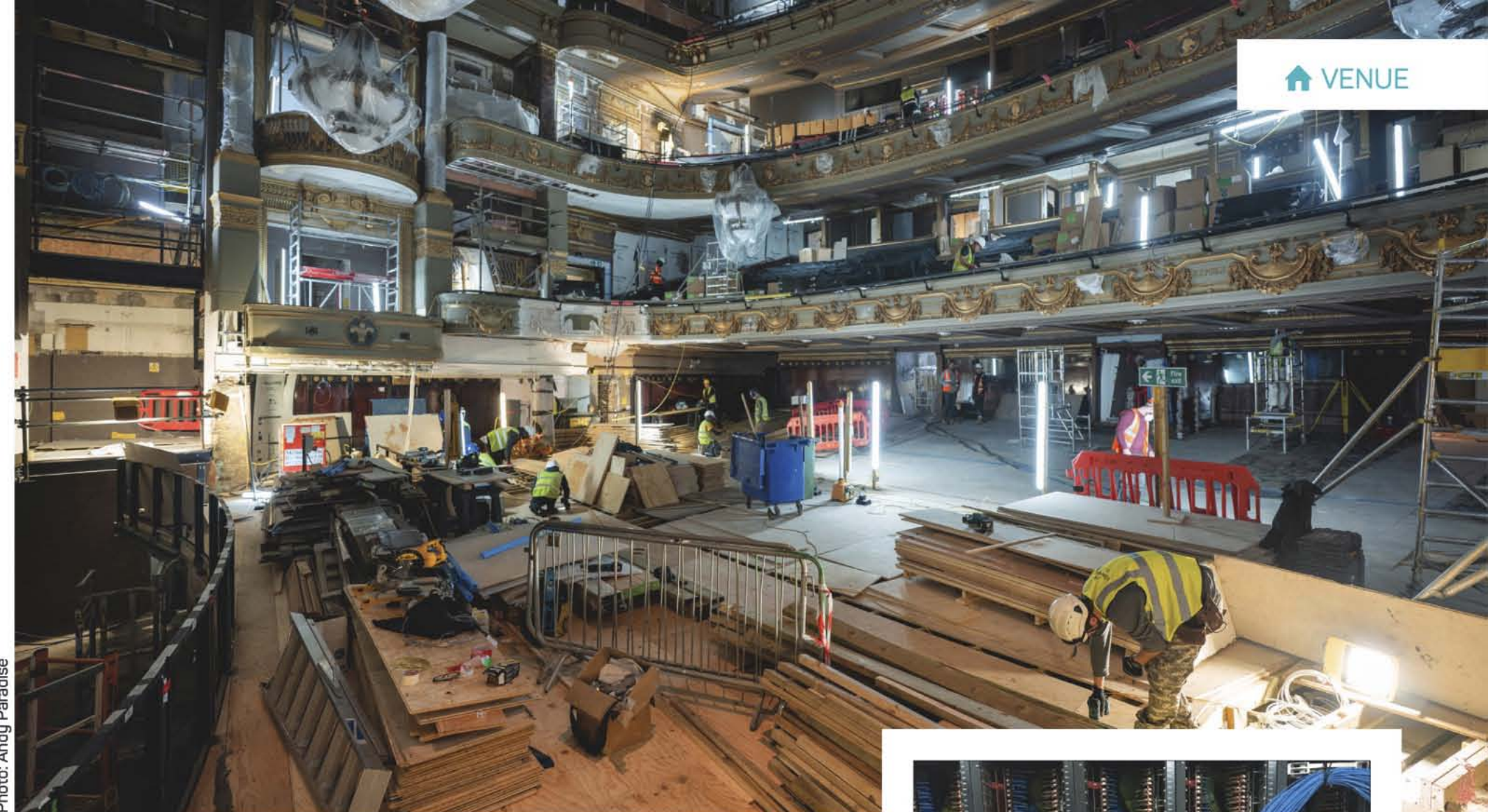
THE STAGE

It's incredibly rare to see a brand new, uncluttered, glistening clean stage house in the West End - many refurbishments don't bother with this area. Perhaps the last time would have been the refurbishment of the Opera House, or maybe the reconstruction of the Lyceum. But now, there is Drury Lane. As one visitor to the theatre's summer gala re-opening day remarked, this is the place you'd want to use to show government ministers just how big, serious and professional an industry we are now.

Finance ultimately imposed limitations on what could be done here: the stage sits within the same four walls underneath the same roof. But the old feeling of being on a historic wooden sailing ship has been replaced with one of being in a solid, modern working space - in the best sense, a factory for making theatre.

Starting at stage level itself, gone is the rake. "We don't think it's necessarily helpful if every show stays flat," Steve Tompkins explains, "but the argument was, don't pre-empt what the rake is going to be, that's part of the show." Fascinating is how the history of the rake lives on in marks and openings in the side walls, but the stage floor - and the two stories of space that exist below it - is an all-new construction. Space that used to be occupied by ancient mechanics and hydraulics that looked like leftovers from early submarines is now two levels of clean, bright, efficient - and versatile - space. "The brief was that there had to be a mezzanine level as well as stage level because it's deep and they didn't just want to create a void all the way through," recalls Charcoalblue's Paul Halter. "But there had to be the flexibility to create small apertures, big apertures, swap some decks for stage machinery, and it all had to take the loads of complex stage designs."

Photo: Andy Paradise



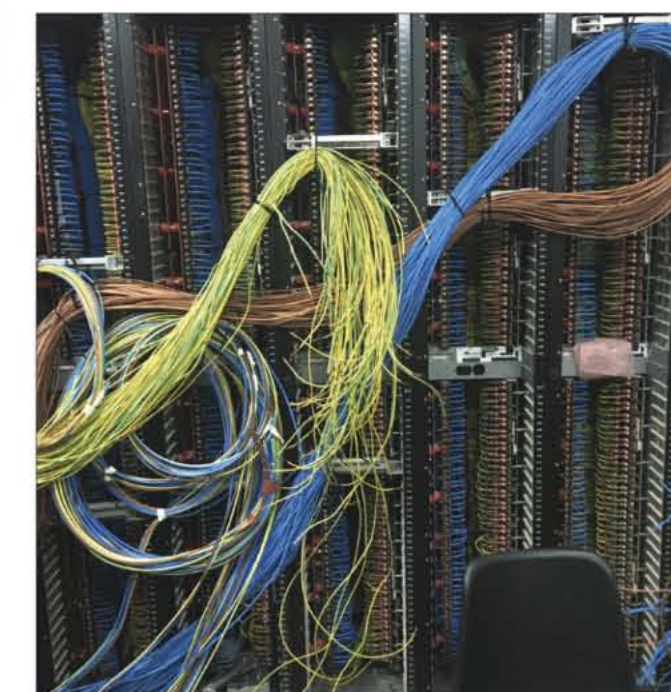
The final solution created by Charcoalblue and Stage Services London has columns distributed throughout the space supporting corners of modular decking, with the system capable of supporting 3,040kg evenly over each deck or a 500kg point load per 300x300mm area. Even with just the decking, there are endless possibilities: the simplest being to remove sections of it to provide access for traps or winches, as *Frozen* has done. But the columns themselves are removable: each is split at mezzanine level so you can remove just the top half or, you can clear out space all the way down. Replace it with a swimming pool if you like: finally, the West End has a theatre able to compete with the big, Vegas-style spectacles.

The system is solidly constructed. "The units are heavy," notes Paul Halter, "but that's what the team in the theatre wanted - they said, we don't take these out very often, we don't want loads of small parts. That might be more suitable for a venue that turns around more often, but here they said they wanted big lumps, and had the rigging equipment to deal with it, including the ability to use chain hoists from the grid to lift each unit into and out of its floor position. To allow that, we asked for detachable lift eyes on each corner. Then the deck frames are designed so you can put scaff bars through to get a good number of people around to pick them up, and there are trolleys for them as well." He also notes the deck's unusual construction. "It was a proposal by Stage Services that instead of it being welded frames of rectangular tubular steel, it's all laser-cut and folded steel. It works really well: I don't think you could make it any better than this, well-designed, brilliantly executed, a real exemplar of large-scale theatre. That's how you should do a stage floor; we're really proud of it."

The design and engineering for the upper half of the stage house - grid, galleries and flying system - was entrusted as a complete project to Unusual Rigging. "The initial discussion was about increasing the capacity of the grid to achieve an imposed load capacity of 200 tonnes uniformly distributed," recalls Unusual's senior project manager, Mike Goodwin. "The complication was we couldn't take the roof off and start again, which would have been the easiest starting point for achieving that."

Instead, the project would retain the six existing century-old steel trusses that support both grid and roof, strengthen them, remove the original wooden grid, then create a new grid beneath them. To allow that to happen safely, Unusual first "completely covered the stage with a 25m by 25m truss and ply crash deck, which was picked up on 20 motors, rigged with an underslung crane assembly then, flown up in phases as we dismantled the existing galleries until we reached a final height just underneath the grid. There it remained until we had finished, simultaneously providing a safe working platform at height, a mobile crane that could reach any part of the substage works, and a safe working environment for the stage level works." They then removed the original grid; this all went back to Unusual where any useful parts were extracted for re-use as part of the circular economy.

That done, the existing roof trusses were strengthened, their ends were lifted, a new concrete ring beam was installed, the roof trusses were lowered to rest on the ring beam and a new grid, all steel except for a rear GRP section, was laid - "now at right angles to the pros arch, though that was quite a challenge since there aren't many right angles in the



From top: The auditorium re-construction progressing in October 2020

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ETC ArcSystem LED drivers for the FOH and auditorium architectural lighting



building, which is slightly rhomboid in plan," as Goodwin reflects. The new grid incorporates access traps with rolling beams above for getting equipment up into the grid space, and then has provision for bars at precise 200mm centres all of the way up the stage. "We looked at all of the shows that had been there and 200mm worked very well. It also let us get about 60 sets as close together as we could into the first four bays of the roof trusses as part of this project, and then LW could later put in another 40 sets the rest of the way upstage if they wanted to."

Careful design has also allowed that consistent spacing even under those roof trusses, which have bars beneath them that then divert to cradles upstage. In total, there are currently 67 sets installed, including up/down-stage bars, all four line, 500kg load, double purchase to keep the stage floor clear and with the front bar just 50mm behind the iron ("for that header you want to hang as close to the iron as possible," Draude notes. "Getting that was a real fight."). A full 100 tonnes of counterweights, newly-made complete with stacking trolleys, is in the building.

Below the grid are three levels of spacious galleries on each side with crossovers upstage and sensible staircases between them - the old cat ladders are all gone. By default, the flying system is manually operated from stage-left - between the new woodwork, crafted for Unusual by Deadline, and brand new rope, there is a delicious smell to the galleries at the moment - but there is plenty of space for the installation of counterweight-assist or direct-lift motors on either that side or in what used to be called the 'slave' fly floor on stage right, though new political sensibilities mean it is now known as the 'secondary working' side. The grid design allows the lines for any bar to be run to either side - or both sides - as required.

Unusual also installed the new fire curtain, "capable of falling in less than 30 seconds and providing a certified 60-minute fire barrier, using a sandwich of a baked ceramic material that allowed us to keep the thickness to a minimum while also allowing the removal of the existing drencher system," according to Goodwin. "The aim of any project we work on is to have satisfied clients, and LW Theatres are extremely pleased with both the end result and the focus shown by all of the Unusual team despite the long duration of the project and the pandemic."

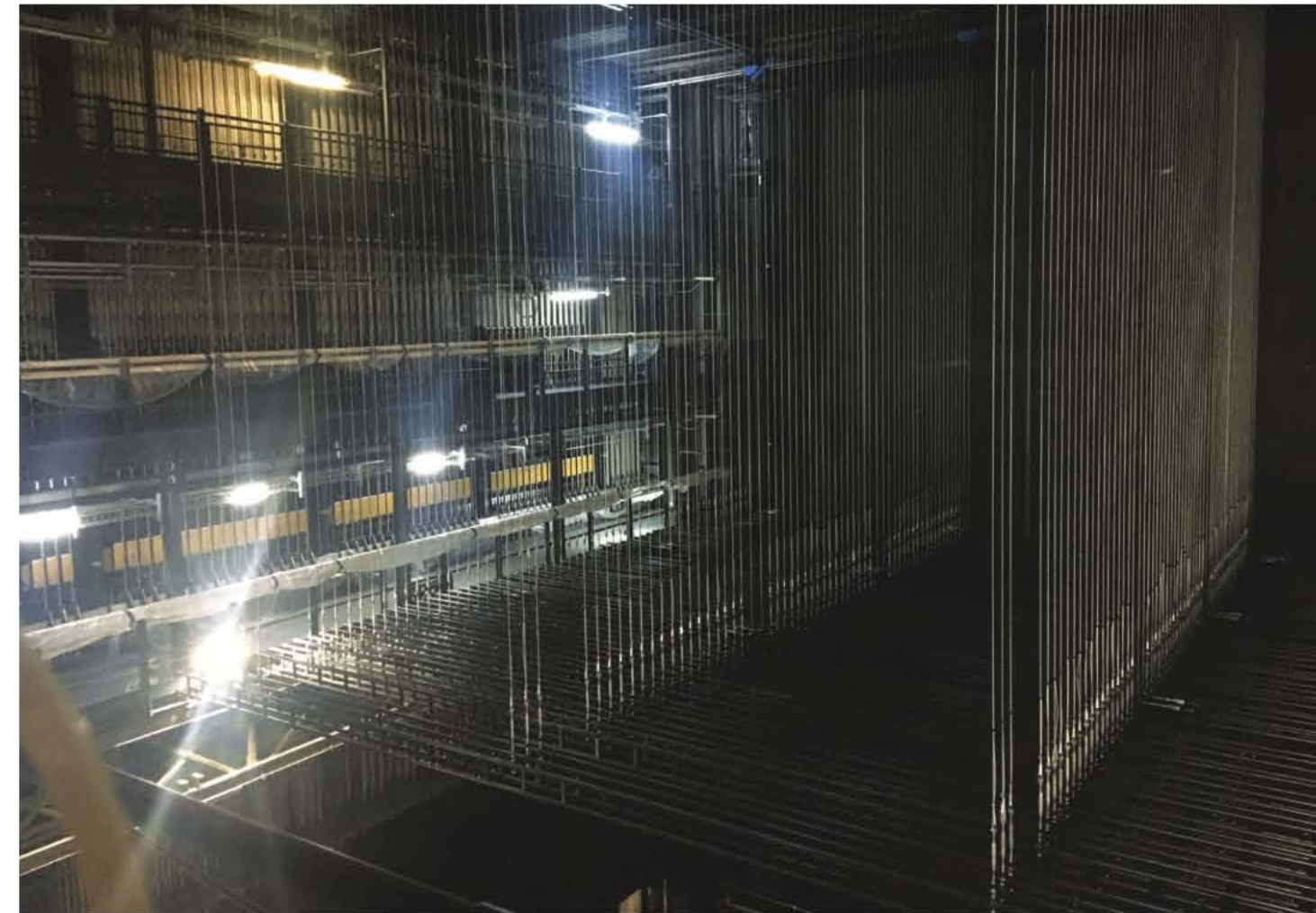
LW are more than delighted, so much that they are dedicating the new grid and flying facilities to Unusual's founder, the late Alan Jacobi.

INFRASTRUCTURE

Led by Charcoalblue and the LW Theatres team, Drury Lane's technical infrastructure has had a sweeping upgrade. There's as much power as anyone could want available - 1,600A on stage, 2,400A in total, with Powerlock and other outlets available in all kind of useful locations. A new principal dimmer room on stage-left houses racks of ETC Sensor ThruPower - 1,344 ways - with a separate rack for houselights. That number might seem excessive, until you remember LW Theatre's policy of keeping their theatres working hard to cover their costs. "We do lots of overlay shows, some of them for TV, and our aim is to be able to have those co-exist with a long-running show without needing to do any cross-plugging and the time and risks involved with that," explains Draude. Or, as Charcoalblue's Ollie Wade puts it: "The theatre has what we class as the permanent temporary system - the show that sits there - then a temporary temporary system on top of that."

The installation also includes an ETC Paradigm control system with button panels around the building, and a BlueSystem worklight system. As with the FOH system, the lighting infrastructure, including the 80 custom facility panels, temporary mains panels, dimmer room layout and more, was designed, supplied and commissioned by PTB with the installation itself carried out by Playfords. PTB's project manager Andy Phillips says: "For this project, rather than provide the complete design and installation package, PTB supported an electrical contractor carrying out the installation work. We had previously worked alongside Playfords, so the working relationship was good and we pulled together to deliver the best possible finished product for our long-standing client, LW Theatres."

For the audio infrastructure, the project turned to Autograph Sound, which has fitted out a big sound room in the basement that still leaves space for show-specific racks and equipment. Here, the aim was to have permanent cable to as many places to possible, with outlet boxes offering combinations of audio XLR, etherCON, fibre, video BNC, comms, cuelights and loudspeaker wiring all running back to a central patch bay. "Not terribly exciting, perhaps, but an excellent



"Finally, the West End has a theatre able to compete with the big, Vegas-style spectacles..."

facility for incoming productions," says Adam Broom, who oversaw the project as Autograph's project and installations manager. Perhaps inevitably, the first show in, *Frozen*, brought with it the need for something that hadn't been installed as part of the permanent system on cost grounds: power for active surround and delay speakers. But the *Frozen* team did note that the installation had let them get the show-specific cabling required to deal with this quickly and neatly to wherever they needed to get it to using that rabbit-warren of cable passes. In another example of a practical detail insisted on by project managers who've worked on the coal-face of fit-ups, these are rigged with permanent, non-removable draw lines.

Draude notes that having so many of the fundamentals permanently installed might reduce a show's rental needs as well as helping speed up load-ins; that might not make a producer pick Drury Lane over another theatre, but it could help sway the choice. "I think producers always start with seat count and that will be most important," he notes. "Everything else will be in the background, really in the production manager's domain. But if you get a good reputation - great staff, great facilities, easy load-in - that can all help."

PEOPLE

With all the money spent on the stuff of the theatre, it's interesting to note that Draude started his list with great staff. Drury Lane has always had good people working there, and Draude and LW Theatres are aiming to ensure that continues and is true of all of their venues by re-organising how their staffing works. "We'll have a building head, Matt Wright, who was here before the refit and has been here through all of it, on site every day ensuring that not a single bit of

trunking, cabling our ductwork went in out of place, the in-house consultant for every electrician and builder who hadn't worked on a theatre before. We'll have a team that just looks after the building. On stage, we're re-naming carpentry into stage engineering to better reflect that it's much more than just wood now. We'll then have multi-skilled technicians but with a lead in each department. We're spending a lot of time finding the right people, which has actually been hard. Once we have them they'll be on sensible 40-hour a week contracts, arranged in a way that should give cover all day to deal with rehearsals and the like without issue. We're also starting apprenticeship schemes to support this. Our aim is that you should be able to have a sensible wage, know when you're working and still have a life outside work."

BACKSTAGE

Receiving a lighter touch have been the backstage areas: dressing rooms have been cleaned up and refreshed; wardrobe has better space on the top floor, now with daylight. And some of those fantastic historic spaces remain largely untouched, particularly the paintframe which has found a new use as a COVID-19 testing area. I personally think it should become the museum of backstage history that so many have wanted for so long; others argue that it could still usefully serve London's theatre community as working paintframe.

OPEN AGAIN

Given all that, £60m or even a bit more, feels like a bit of a bargain. Every part of the building feels refreshed, re-invigorated and alive in a whole new way. You'd want to go hang out in the front of house spaces just for somewhere to go, regardless of whether you were seeing

a show (though it'll be interesting to see how those expensive carpets and other finishes stand up to the *Frozen* kids and their ice creams). The auditorium just feels like a better, warmer, friendlier space to enjoy a show from. And the stage feels like a better, safer, easier place to put on a show - hopefully one day including the kind of true, epic shows this theatre could now easily accommodate and deserves to get. All it needed at the time of our visit was people to truly bring it back to life. "If you think the auditorium feels good now, then it promises really well for when it's got almost 2,000 people in it," concludes Steve Tompkins. "The acoustic, the vibrancy, the dynamism, the sense of intimacy - I think it'll go through the roof at that point." The strong reaction to the opening of *Frozen* suggests that is exactly what is now happening every night.

"Over five years, we have worked to define, interrogate and perfect Andrew and Madeleine Lloyd Webber's extraordinary vision for the Theatre Royal Drury Lane," adds project director Dan Watkins. "It has been a complicated project; together, we have created something very special and peerless in British theatre. We are very proud that The Lane can finally own its place as the number one musical house with its technical capability and infrastructure finally being able to match its renowned scale, grandeur and history."

Last word surely should go to the benefactor who enabled all of this, Lord Andrew Lloyd Webber: "I believe that The Lane is now one of London's most warm and beautiful auditoriums, and the most versatile historic theatrical space anywhere in the world."

Fit for another 100 years, at least. Good enough to be around longer than that. ●

➦ From top: View across the stage house from one of the three levels of spacious galleries per side

The stage house during the load-in for *Frozen*

➔ Facing page: The new flying system incorporates 60 500kg capacity double purchase sets on 200mm centres, with provision made to install a further 40 sets upstage if required in the future