



ALEXANDRA PARK AND PALACE CHARITABLE TRUST BOARD

11 October 2021

Report Title: Fabric Maintenance Annual Update

Report of: Neil Coe (Building Surveyor), presented by Emma Dagnes (Deputy CEO)

Purpose: This cover report summarises the annual review of the Fabric Maintenance Plan and seeks the Board's approval to note and proceed with the recommended priorities.

Local Government (Access to Information) Act 1985 N/A

1. Recommendations

- 1.1 To note progress made in 2020/21 despite the challenges of the very limited budget, increasing number of severe weather events placing additional pressure on the assets.
- 1.2 To approve adjustments to priorities as listed below with more detail to be presented at the meeting:

Sector 1 –West Entrance, Palm Court and Adjoining Spaces

- Priority A Straighten, repair & reglaze external WSY doors
- Priority A Palm Court Roof -Glazing overhaul & repairs
- Priority A Palm Court extras and straightening of 1no vent
- Priority A Palm Court minstrel gallery rooflights
- Priority A Roof Access Palm Court July 2020 and August
- Priority A Palm Court West Atrium -replace GWG glass next to door exit
- Priority A West atrium Replacement of 2No door stays
- Priority A Palm Court Glazing Repairs Access –January 2021
- Priority A Palm Court Roof Repairs January 2021
- Priority A/B SW Pavilion roof repair and decoration
- Priority A/B Palm Court arched window glazing repairs and access windows
- Priority A/B Redecoration

Sector 2 –West Hall, West Corridor and Adjoining Rooms - Priority A/B Redecoration

Sector 3 –Service Yard, Stores and North West Tower

- Priority A/B West hall Organisers office corridor redecoration works
- Priority A Security corridor/staircase redecoration works
- Priority A Level 5 corridor/staircase redecoration works
- Priority A Balance for West Yard Acoustic Doors
- Priority A Replace rooflights over Marble Staircase

- Priority A West Hall inner shutter emergency screen and door and repairs to existing doors
- Priority A Roof leak repairs
- Priority B North West Service Hall roof access install

Sector 4 –South West Tower

- Priority A SW Tower Masonry Repairs & Reinstatements
- Priority A Access -spider hire, generator and leads
- Priority B SW Tower renew roof, windows and internal scaffold

Sector 5 –Panorama Room and South West Colonnade

- Priority A Emergency repairs to PR link roof
- Priority A/B -SW Colonnade floor slab renewal (2 bays)
- Priority B SW Colonnade & West Light well roof access install

Sector 6 –The Great Hall

- Priority A Great Hall floor patching repairs
- Priority A Spaceframe sample decoration panel
- Priority A Spaceframe welding repairs
- Priority A GH/NY Bridge/fire escape Structural survey & recommendations
- Priority A CAD elevations Bridge/GH North
- Priority A/B Great Hall Partial Redecoration January 2021
- Priority A Great Hall/North Service Yard Bridge & Stairs structural fees
- Priority Additional welding to the space frame September 2020
- Priority A Great Hall Spaceframes -External Redecoration
- Priority A Great Hall Glazing Servicing & Replacements
- Priority B Carry out feasibility for resurfacing the entire floor to Great Hall

Sector 7 – Ice Rink and Adjoining Spaces

- Priority A Ice Rink Duct Trims
- Priority A Smoke Vents Replacement
- Priority A/B Works to Ice Rink Perimeter Flat Ceiling
- Priority A Plinth & surround works Ice Rink & Café
- Priority A Additional masonry works to Ice Rink west wall
- Priority A Remedial flooring works
- Priority A Ice Rink West Staircase -Replastering and renewal
- Priority A/B Ice rink partial redecoration to doors, by stands, East Corridor plinths & East Lightwell
- Priority A Glazed roof lantern (West) over Ice Cafe/Reception
- Priority A Roof repairs (south)
- Priority A Upgrade works to low ceiling, ice pad, replacement kicker boards
- Priority A Essential barrier works
- Priority A Sump pit waterproofing Snow pit & plantroom pit

Sector 8 –Theatre, North East Tower and Adjoining Spaces

- Priority A Theatre ceiling joist hanger installation-East & General
- Priority A Door Refurbishments
- Priority A Theatre ceiling joist hanger installation-East end
- Priority A Spider access for bi-annual inspections of ceiling, walls & proscenium arch
- Priority A Theatre Bi-annual ceiling, proscenium arch and walls inspections January 21
- Priority A Theatre auditorium ceiling -Additional strengthening works structural advice
- Priority A Theatre Stage propping scaffold inspections 2020/21
- Priority A/B Redecorations

Sector 9 : Former BBC Studios

- Priority A Door refurbishments East Lightwell
- Priority A/B East Lightwell replacement ceiling tiles
- Priority B East Lightwell roof access install

Sector 10 : South East Tower and Adjoining Spaces

- Priority A BBC Tower 4th floor CEO office -Prop and resecure
- Priority B BBC Tower -Additional decorations after rewiring
- Priority A Door refurbishment
- Priority A/B Decoration & repairs to staff toilets, part offices & corridor
- Priority A BBC colonnade office cornice -urgent works Jan 2021
- Priority A Over felting to leaking zinc roof over BBC link/toilets
- Priority B Extra over to renew roof with zinc coverings
- Priority A/B Redecoration

Sector 11 : East Court, Ice Rink Foyer and Adjoining Spaces

- Priority A East Court Roof -Glazing overhaul & repairs
- Priority A Glazing Works to East Court -Retention for glass changes
- Priority A East Court Roof -Access -July 2020
- Priority A East Court ramp Yorkstone pinning & rebedding
- Priority A East Court Roof Repairs March 2021
- Priority A Equipment hire for East Court Roof Repairs March 2021
- Priority A SE office building staircase renew beam and ceiling
- Priority A/B Zinc roof renewal and parapet repairs over corridor
- Priority A/B Glazing repairs to East Lightwell

Sector 12 : South Basement

- Priority A -Coniston -Retention
- Priority B Annual structural survey

Services : Life Safety

- Priority A Replace 2 x CBS units West Hall Gantry
- Priority A Tank 1 + 2 remedial works
- Priority A Replacement of 1 x aspiration unit in Palm Court

Services : Critical

- Priority A/B B&K distribution board and Skate hire distribution board
- Priority A/B Move isolator, contactor &DB from gantries to accessible location x6
- Priority B South Terrace Power Supply
- Priority A Power distribution 5 year fixed wiring testing 20% per year
- Priority A Repairs to Back-up generator Main Building
- Priority B Back-up generator Main Building
- Priority B Power distribution 5 year fixed wiring testing remainder

Services : Operational

- Priority A West Yard Goods Lift additional enclosing
- MOB Controls & further works Supply & Fit 1 No Safety Control Board
- Priority B Re-location of Air conditioning Unit PC4
- Priority A Supply & Install 3 x 2000L Flamco Expansion
- Priority A Palm Court disabled internal doors
- Priority A Palm Court plantroom -Replace B&K hot water booster set
- Priority C Remove redundant chiller to North Yard serving Palace Suite
- Priority A BMS remedial works -Replace 7 Belinodampers

- Priority A Replace insulation on AHUs and pipework on level 5 roof
- Priority A/B Upgrade of BMS system
- Priority A Roof cleaning
- Priority A Clean up pipes and repaint with waxlow paint
- Priority A Pipe modifications on Level 5 roof plant
- Priority A Install and commission new DP switch on Boiler 1
- Priority A Replace PCB and fan/motor
- Priority A Replace 9 flow control valves East Corridor smoke vents

2. Background

- 2.1 Further to the preparation of the 10-year Fabric Maintenance Plan by the Surveyor to the Fabric, Purcell, in 2014 an update has been undertaken and the priorities for Year 7 2020/21 are set out within Appendix 1.
- 2.2 Over 10 years the plan identified that the Trust needed to spend £14.7m on the building fabric repairs, services repair/renewals, and improved roof access. This covered maintaining and repairing the existing elements, rather than wholesale enhancements which would be covered by major projects. The Trust's capital budget and project funds do not cover all of the scheduled works.
- 2.3 The services elements (electrics, fire systems etc.) on the Theatre, East Court and BBC Studios were excluded from the FMP, as complete redesign and renewal was envisaged under the East Wing Restoration Project (EWRP). Similarly, the services installed in the new West Yard Building post-date the original FMP.
- 2.4 Overall progress since the last review of the 10-year Fabric Maintenance Plan is:
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|----------------|-------|--|
| Fabric items | 29.2% | (actual against target of 67.0% for end of Year 6) |
| Services items | 57.7% | (actual against target of 67.8% for end of Year 6) |
- 2.5 Figures on progress are also available for last year where the normal reporting cycle was disrupted by the pandemic with:
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|----------------|--------|--|
| Fabric items | 33.7% | (actual against target of 75.7% for end of Year 7) |
| Services items | 68.87% | (actual against target of 75.9% for end of Year 7) |
- 2.6 The requirements (not actual funds available) break down as:
- | | | | |
|---------------------------|-------|----|-------------|
| Building Fabric Repairs | 18.5% | of | £11,850,200 |
| Services Repair/Renewal | 44% | of | £2,569,400 |
| Roof Access Installations | 1% | of | £279,800 |
- 2.7 Year 6 continued to focus on Health and Safety and making the building weather-tight, and the significant deterioration to the East Court and Palm Court glazed domes and atriums began to be addressed with initial urgent repair packages. Additional resources were found in Year 7 and 8 for the full survey and external servicing to the East Court and Palm Court glazing, and external servicing and repairs to part Great Hall roof glazing (2 out of 16 bays), which largely coincided with lockdown and the main event spaces being out of use.
- 2.8 The deferral of the TV studios restoration (originally part of EWRP) will delay the progress of the FMP scheduled fabric repair and services renewal in these areas into Year 8 and beyond.

- 2.9 Installing safe access to all roof areas has been deferred further (with previous progress on East Wing Restoration Project and West Yard Project in Year 4 and part Great Hall in Year 3), due to other H&S and operational priorities. LBC has been granted for the Great Hall roof access upgrade, but only part has been implemented, and elements of the consent may benefit the potential proposal of a Skywalk and to improved maintenance access provision.
- 2.10 The condition of the East Court and Palm Court glazing, gutters and leadwork has improved, with full abseil access gained to both domes and all atriums. We introduced a bi-annual glazing service in Year 6 and the aspiration was to bring the East Court and Palm Court back into reasonable and serviceable condition within 1.5 to 2 years. This has already been achieved between Year 7 and 8 and to take advantage of the lockdown, and reduced use of public spaces.
- 2.11 The bi-monthly periodic inspections continue to the external elevations, due to lack of funds for conservation works, and are still proving essential, with the condition stabilized over the last 12 months. We had an unusually hot and wet year and this is likely to impact on the condition and safety of the external fabric over this winter and next spring. The SW Tower decorative rendered features were repaired to the public elevations (South & West) and are holding up well. Further stabilizing work also recently completed to Palm Court entrance and Great Hall North bridge, in readiness for reopening of the Palace to major events.
- 2.12 Progress has continued with the renewal of services, with priority on Life Safety installations, including fire alarm network, smoke vent control panels, and central battery systems for the emergency lighting.
- 2.13 Reasonable progress has also been made on the renewal of Operational services installations, such as Great Hall loading bay shutter, which also has Life Safety and Licensing requirements, and to make the Palace more resilient and controllable.
- 2.14 The FMP is split into 13 building sectors and the condition of each element has been reassessed to compare between the original survey of 2014 and that of late 2019, and are classed as 'Poor', 'Fair' and 'Good'.

The priority ratings for each work package have also been adjusted to suit the current condition and operational requirements, and are relisted under:

- A = Within 12 months,
- B = Within 36 months,
- C = Within 5 Years, and
- D = Desirable – Within 10 Years.

- 2.14 We presently have capital and project budget allocations to carry out predominately Priority A items only during Year 7 & 8, with several Priority A and A/B items deferred from Year 6 into subsequent years. All of the Priority B, C and D items will need to be deferred into Year 8 or 9 and beyond; this includes approximately £4.9 million Building Fabric/Roof Access items and £220,000 Services Infrastructure items.

- 2.15 The proposed deferral of these Priority B & C items (and some Priority A items) will have an impact on the presentation of the building, such as the internal decorations to the Great Hall (although the impact has been lessened by modest improvements to the SW corner and east wall), West Hall and Ice Rink (partially completed). The brick and render repair to the South Terrace/Traitor's Gate and low level to the BBC colonnades and SW Tower also remain desirable, together with the completion of the renewal of Critical services items.
- 2.16 The installation of a bespoke fire alarm system to the Great Hall, was considered a Priority A in 2019 and kept as a reserve item. The system is still functional but difficult to maintain, and further design work has been done to find a system that will fully meet the operational requirements of this multi-purpose space. The new aspirating fire alarm system is being installed to Great Hall/West Hall and was combined with the West Hall rewiring/relighting project. Ancillary spaces are also being rewired and new detectors fitted along with additional call points. The change over from old to new systems should take place in the next few months.
- 2.17 This is not an exhaustive list; other reserve items include: remainder of central battery system for emergency lighting (3no. at £15,000 each) and drainage channel repairs/levelling to South Terrace at £26,000.

3. Risks

- 3.1 Due to lack of resources the Trust has had to spend below the recommended amount to bring the fabric and services into good condition within the 10-year plan and the general condition has only improved slightly in certain areas.
- 3.2 The completion of the East Wing Restoration Project and completion of the West Yard Project have significantly improved the condition of the East Wing of the Palace and the safety and stability of the North wall and NW Tower. More recent improvements have been to Ice Rink (Interior), and projects to be concluded shortly on the West Hall (Wiring/Lighting/Fire Alarm), Great Hall (Fire Alarm) and East/Palm Court (Roof glazing) which will be reflected in the next annual review.
- 3.3 The original percentages of the building being 60% in use to 40% semi-derelict/out of use, has gradually improved with the ratio at the end of Year 5 & 6 remaining at 71% to 29%. Further modest enhancements are hoped to be achieved by end of Year 7 & 8 (2020/21 & 2021/22) with the intended conservation repair of the North East Office Building (with up to 90% grant from Historic England) and potential Meantime Use/Investment in various semi-derelict/unused spaces.
- 3.4 The plan to renew all life safety systems which include fire alarms systems, smoke vents controls, emergency lighting, public address speakers, sprinklers and lightning protection, by the end of Year 4 had slipped into subsequent years. However, good progress was made in Year 6 to complete the fire alarm network upgrades, renew the smoke vent controls, renewal of 5no. central battery systems (out of 13no.), and renewal of Great Hall loading bay shutter which forms part of fire strategy. Further progress on Great Hall/West Hall/Palm Court fire alarms and relocation of emergency lighting batteries for West Hall is completing in Year 7&8.
- 3.5 The structural condition of the Victorian basements under the Panorama Room and SW Colonnades has stabilized following the structural investigations/repairs, enhancements to drainage and ventilation, and waterproofing completed in Year 5.

- 3.6 The proposed renewal of two bays of the corroding clinker concrete floor slab to the SW Colonnades at £39,000 reallocated into Year 7 has been deferred until 2022/23 due to higher priorities elsewhere. There are still no immediate plans at the time of writing for the redevelopment of this area with reinstatement of a building behind the colonnades and partial use of the basements.
- 3.7 The condition of the roofs, roof lanterns and joinery had deteriorated with health & safety and security implications, and the capital budget was reallocated to carry out essential works to Palm Court external doors, Theatre balcony fire doors, East Lightwell/ BBC store fire doors, and priority repairs roof leaks. Palm Court Suites lantern refurbishment was deferred until 2021/22 and will be part funded by the Rose Foundation.
- 3.8 The Great Hall space frames gained Listed Building Consent to change the colour from 'blue' and have been repaired and redecorated in 'aluminium grey' marine paint system which should provide lasting protection for many years. The spaceframes now harmonise better with the roofscapes and will assist with the colour strategy for the Palace.
- 3.9 Long overdue repairs and enhancements have been carried out to the Ice Rink before and during lockdown and the internal condition has noticeably improved. Further works, including refurbishment of toilets/changing rooms and renewing the stud flooring throughout (particularly to Ice Café/Reception) is needed to change the condition rating from 'Fair' to 'Good'.
- 3.10 It may be worth reiterating that the FMP had to take a pragmatic approach to the renewal of the business-critical services items (including high voltage breakers, power distribution, generators, transformers and IT), as these date from the late 1980's and are beyond their standard serviceable life but are well built and operational. In the event of a breakdown, it may not be possible to restart these systems or obtain replacement parts, which proved the case for the West Hall wiring and lighting.
- 3.11 We also previously reported the full cost of renewing all of the services throughout the Palace was estimated at £26 million and, therefore, the decision was taken to upgrade as part of each major project.
- 3.12 The condition of the services was originally rated as Poor throughout largely due to the age of the installations. Sectors such as the Theatre and East Court previously improved to Good/Fair due to renewals within the EWRP (which were excluded from the FMP), and progress had been made on the Life Systems and some Operational Systems, including the main lifts. The renewal of the services is likely to be greater than that included within the FMP by Year 10 based on the average/extra spends to date.
- 3.13 The rewiring and relighting of the West Hall proved essential and this major project was completed during lockdown and extended closure of the event spaces. Energy efficiencies for relighting being funded by Salix. The rewiring of the Great Hall serveries and BBC Offices also proved necessary, and this was carried out by the in-house engineering team to control costs.
- 3.14 The condition of the fabric improved significantly to Sectors 8 (Theatre, NE Tower and Adjoining Spaces) and Sector 11 (East Court and Adjoining Spaces) the year before,

and partially to Sector 3 (West Service Yard Storage Building and NW Tower). This is due to completion of the repair items to the Theatre and East Court under the EWRP, and partly due to the NW Tower and North Wall through the West Yard Project.

- 3.14 The condition of the fabric has remained 'Fair' to 'Poor' in the remaining Sectors, with further slight deterioration to the Ice Rink, Palm Court and East Court roofs, and SW Tower elevations addressed during lockdown. The BBC Wing and South Basement elevations remain as 'Poor' but in relatively stable condition, whereas the North East Office Building has deteriorated further.
- 3.15 The re-securing of the North Wall by the new building substantially reduced the structural risks associated with the free-standing North Wall and its condition has remained more stable and manageable.
- 3.16 Progress has continued although not achieved the target (particularly on the Fabric items) due to lack of funds, however, Trustees are reminded that the schedule of works is dynamic and regularly reprioritised when issues emerge, or surveys indicate different works are required. Lockdown has had a major impact on the priorities and availability of time to carry out essential maintenance and renewal. The priority is always the safety of the public, staff, and contractors but also to make the building and operations more resilient in the longer term.
- 3.17 Opportunities still exist for the enhancement of the derelict North East Office Building, prominent but disused SW Tower, and fit out of the South East Office Building in the years ahead. The funding for NEOB was not available (due to huge demands on Historic England during Lockdown) and the Trust was unable to match fund the 10%. The building was deteriorated further, and we would hope to reapply in the next funding round.
- 3.18 The Trust holds valid Public and Employer Liability Insurance and property insurance (with specialist insurers for historic buildings) as previously reported. The insurers are fully aware of the building condition and our programme of repair and maintenance, and their representatives attend annual meetings and inspections of the building. Any areas or faults highlighted by the insurers at the time of inspection are prioritised and the insurers are kept well informed of the progress to avoid any risk of invalidating the insurance by not complying with insurers' recommendations.

4. Legal Implications

- 4.1 The functions of the Trust stipulated in the Alexandra Park and Palace Acts and Orders include: to uphold, maintain and repair the Palace as a place of public resort. Under charity law the Trustee Board Members also have individual and collective responsibility for safeguarding the Charity's assets for the benefit of the public.
- 4.2 The Council's Head of Legal & Governance has been consulted in the preparation of this report, and in noting the legal implications detailed above, coupled with the fact that both health and safety and insurance issues are kept under review, with appropriate action taken when necessary, has no comments.

5. Financial Implications

- 5.1 Reallocation of capital items to remain within budget for 2020/21 with carry-over from deferred projects allocated in 2021/22.
- 5.2 The Council's Chief Financial Officer has been consulted in the preparation of this report and advises that good asset management is an essential component of the Trust's business activities. The proposals within the report appear consistent with the Trust's obligations).

6. Use of Appendices

None

7. Background Papers

APP Fabric Maintenance Plan, APP Colour Framework, 2020/21 Trust Budget.